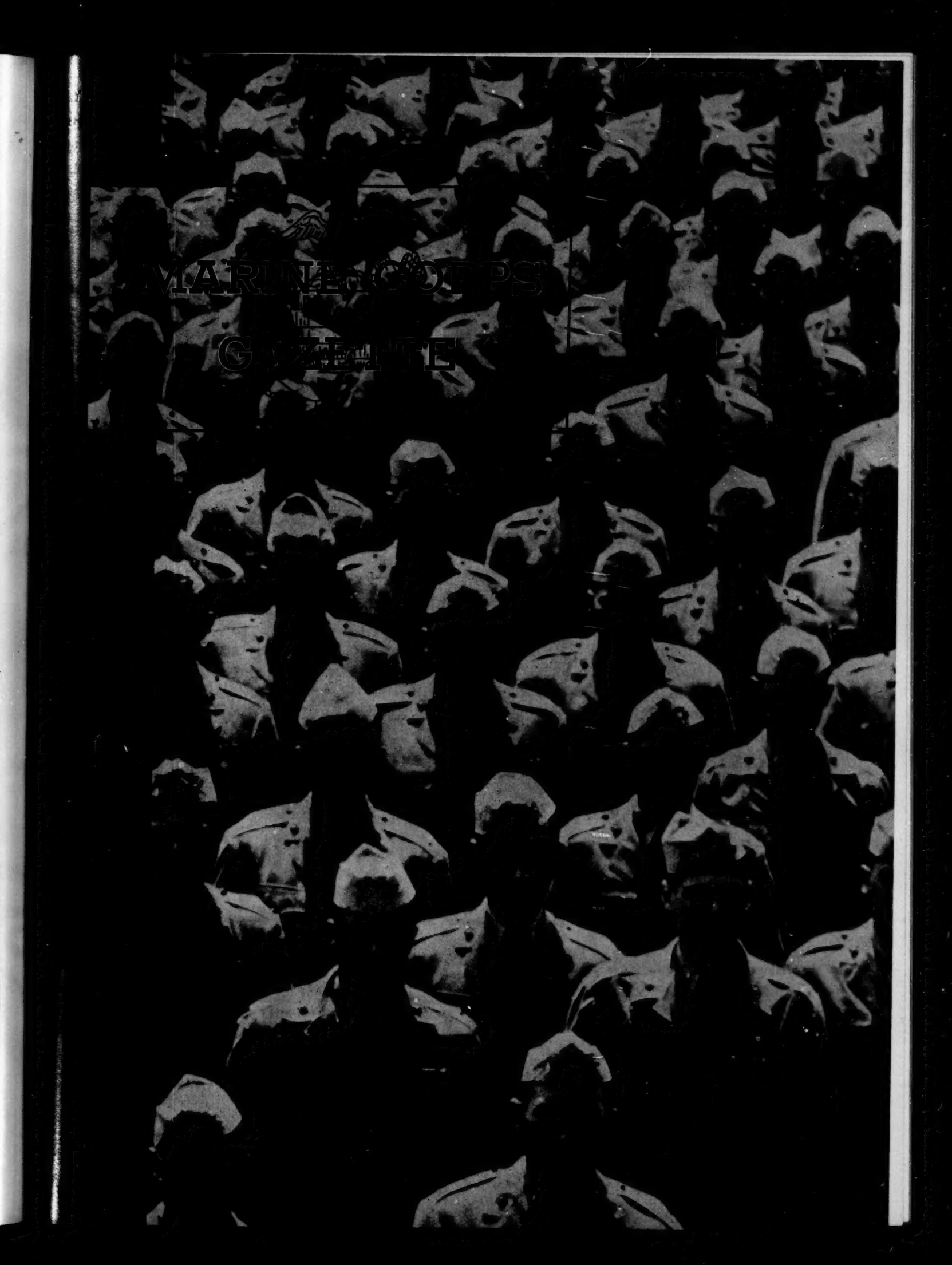
MARINE CORPS
GAZETTE

Marine Corps Gazette

JULY 1949

CONTENTS

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THIS MONTH'S COVER: About the time you read this, the young gentlemen whose faces appear on the cover will begin to report in for duty "with the troops." They are a random sample of the some 215 Basic School graduates who, with nine more or less rigorous months at Quantico behind them, now are facing the mysteries of proceed and delay, FAGTRANS incl air cl III, furas sea d, calling hours and cards, and the JO room. The photograph is by (and twenty-five dollars to) Captain C. J. Stadler and TSgt. J. R. Stith.

THE MARINE CORPS GAZETTE
Professional Magazine for the United States Marines
JOURNAL OF THE MARINE CORPS ASSOCIATION
Offices: Box 106, Marine Corps Schools, Quantico, Virginia
Telephone: Extension 4780 or 2112

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THIS MONTH AND NEXT: If LtCol Henry Aplington, II, isn't mad at the GAZETTE, he has a right to be. For some reason, the present staff can't seem to handle the name. Last summer, we listed him as "LtCol Henry Henry Aplington, II." We managed to get it right in the April issue, when LtCol A's *Keep It Clean* appeared, but last month—well, it was the unkindest cut of all. We left off his byline entirely. We can only hope that our check for $241 will help assuage Col Aplington's feelings, but that doesn't excuse us from appropriate punishment. So here goes:

North China Patrol was by LtCol Henry Aplington, II.

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VOLUME 33, NUMBER 7.

Entered as second-class matter at the post office at Quantico, Va., under the act of March 3, 1879. Published monthly: single copy, 30 cents; subscription rate, $3.00 a year. Subscriptions of all members or honorably discharged members of the Armed Forces include membership in the Marine Corps Association. Articles contributed by members of the naval service are governed by Section 1252, U. S. Navy Regulations, 1948. Opinions expressed in the GAZETTE do not necessarily reflect the attitude of the Navy Department nor of Headquarters, Marine Corps. Payment for contributions is made on publication at prevailing space rates.

"The Voice with a Smile"

**"Hail ye small, sweet courtesies of life,
for smooth do ye make the road of it."**

Often we hear comments on the courtesy of telephone people and we are mighty glad to have them.

For our part, we would like to say a word about the courtesy of those who use the telephone.

Your co-operation is always a big help in maintaining good telephone service and we want you to know how much we appreciate it.

BELL TELEPHONE SYSTEM

TO THE EDITOR

Message Center

Percentage of "Goms" . . .

DEAR SIR:

I have been a reader of the GAZETTE for almost three years and I have followed with interest the many articles and discussions on articles of clothing and equipment, and particularly on discipline.

In regard to the former, it is most interesting for an enlisted man to see the interest that our Corps officers take in the personal appearance and comfort of their subordinates. I have enjoyed especially the letters submitted by Maj Donovan, Lt Schwaneke, and Lt Harrington. From personal experience I have found many faults with the present utility uniform, the battle jackets and the lack of suitable "foul weather" gear to wear with any of the authorized liberty uniforms. I, and I know many others, have often wondered what *would* be done and if anyone really cared if anything *could* be done. It is very gratifying to note that the suggestions submitted by our officers are really tried and tested.

Congratulations to "Tech Sergeant," the author of [the letter] *MCI For Boots,* which appeared in the May '49 edition. He has hit on a very pertinent problem of the Corps. With all due respect to the DIs, I, and more important, my friends, who are outside the Corps, have noted a laxity in the usual smart appearance of some marines while on liberty. The main offenders seem to be men fresh from "Boot Camp."

The open blouse, the polish hungry shoes, and the "Hot Shot Charlie" style of wearing the cap, and the unsoldierly conduct, which has been exhibited for public comment, are certainly wearing "The Thin Line of Tradition" thinner. What has happened to the "eagle-eyed sentry," and the personal pride that ALL marines are supposed to have? These poor examples are carrying on practices which are prevalent in far less traditional organizations than the Marine Corps. Isn't it possible to eliminate this small percentage of "goms," which seems to be growing like a cancer, from our system?

I believe it is possible; and with no strain. It is the duty of the enlisted men as well as the officers to get on these people and square them away. They have a better opportunity, being in constant contact with the offenders, and should be proud to render such an invaluable service to the Corps.

L. C. MAID,
Corporal, USMCR.

Each month the GAZETTE pays five dollars for each letter printed. These pages are intended for comments and corrections on past articles and as a discussion center for pet theories, battle lessons, training expedients, and what have you. Correspondents are asked to keep their communications limited to 200 words or less. Signatures will be withheld if requested; however, the GAZETTE requires that the name and address of the sender accompany the letter as an evidence of good faith.

Platoon Leader Without Three Hands . . .

DEAR SIR:

As a rifle platoon leader during the war I have used both the carbine and the M-1 as my personal weapon at one time or another. I have never found it desirable or advisable to substitute the pistol in their place in order to increase my efficiency in combat. The pistol can be, and was carried by more than a few, as an additional or auxiliary arm. However, it was a rare thing to find company officers, much less rifle platoon leaders, relying solely on the hand gun for protection. Once I found myself in an unpleasant situation where I had to rely entirely on a pistol. It was at this time that I fully appreciated the inventor of the carbine. At least with this weapon, I had a chance of reaching out and tagging the individuals who were firing at me. Also my chances of scoring a hit on some portion of the enemy's elusive anatomy, before he was within grenade throwing range, were good. Needless to say, I was most unhappy with the trusty 45 at that time.

Granted the pistol is good for close in work, at night, or in house to house fighting, etc., but as a platoon leader's everyday weapon, it falls way short of the mark. This fact was learned the hard way early in the war.

I also found that neither the carbine or the rifle was a hindrance in the performance of my duties as a rifle platoon leader in combat. Neither in the assault of a fortified position nor while on combat patrols, did I wish to be armed only with a pistol. I don't recall platoon leaders from other units, Marine or Army, expressing themselves any differently on the subject either.

I lay no claim to having been a platoon leading genius, yet I was able to lead my men, read a map, and make use of SCR 536, without three hands. I accomplished the latter by entrusting my radio to a good, savvy runner. For routine

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KEEPING ON THE RIGHT TRACK with Sperry Loran

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Message Center

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matters he functioned as my talker. When I wished to transmit or receive, he handed the handie talkie to me. I didn't become tied to my radio.

Therefore, I am rather inclined to agree with Lt Dudley Cook's comments in the March issue of the GAZETTE. Officers of other nations may enter combat armed only with a swagger stick or a pistol, but I'm sure it doesn't make them more efficient platoon leaders. As for myself, I feel a great deal more aggressive with something more substantial in my hands. I believe that our pistol advocates would soon lose their fondness for this weapon once actual hostilities commenced. Admittedly it is a more convenient weapon for peacetime soldiering, during maneuvers, inspections, parades etc. However, its disadvantages as a combat weapon for infantry platoon leaders put it way down the list.

Also congratulations to Maj Donovan on his suggestions for a military utility uniform and especially for his ideas concerning the adoption of the British gaiter or the U.S. Army combat boot. Either would be more efficient in the field and sharper appearing when on duty than our present Spanish American War vintage leggings.

DEAN N. McDOWELL
Captain, USMC.

Advice for JOs Dept . . .

DEAR SIR:

I have just finished reading MSgt C. V. Crumbs' article in the May issue of the GAZETTE and I must say the MSgt has the right dope, suh—

The master sergeant, regardless of the number of years and the different stations, does not mean that all junior or senior Marine officers fit in the three categories he has named.

During the war years many officers were taken from civilian life—Some were just out of college, others worked for themselves or someone else. The number of years in public life and the lack of these years in public life could have been the cause of the bored, don't care attitude or could have caused these officers to be "tough" with the boys.

I did duty in the Marine Corps as an enlisted man and as an officer, and the greatest bit of advice given me was given by a sergeant major who had 28 years in the Corps. This little bit of advice helped me to be able to get the most out of every man who worked or served under me—I will pass it on as the sergeant major gave it to me "Never tell a marine to do a thing, just request that it be done."

I am a firm believer in returning salutations and thanking men in a command for work well done.

In closing, being a soldier is easy, being a marine is not hard, but being a proud marine is born in a man and starts

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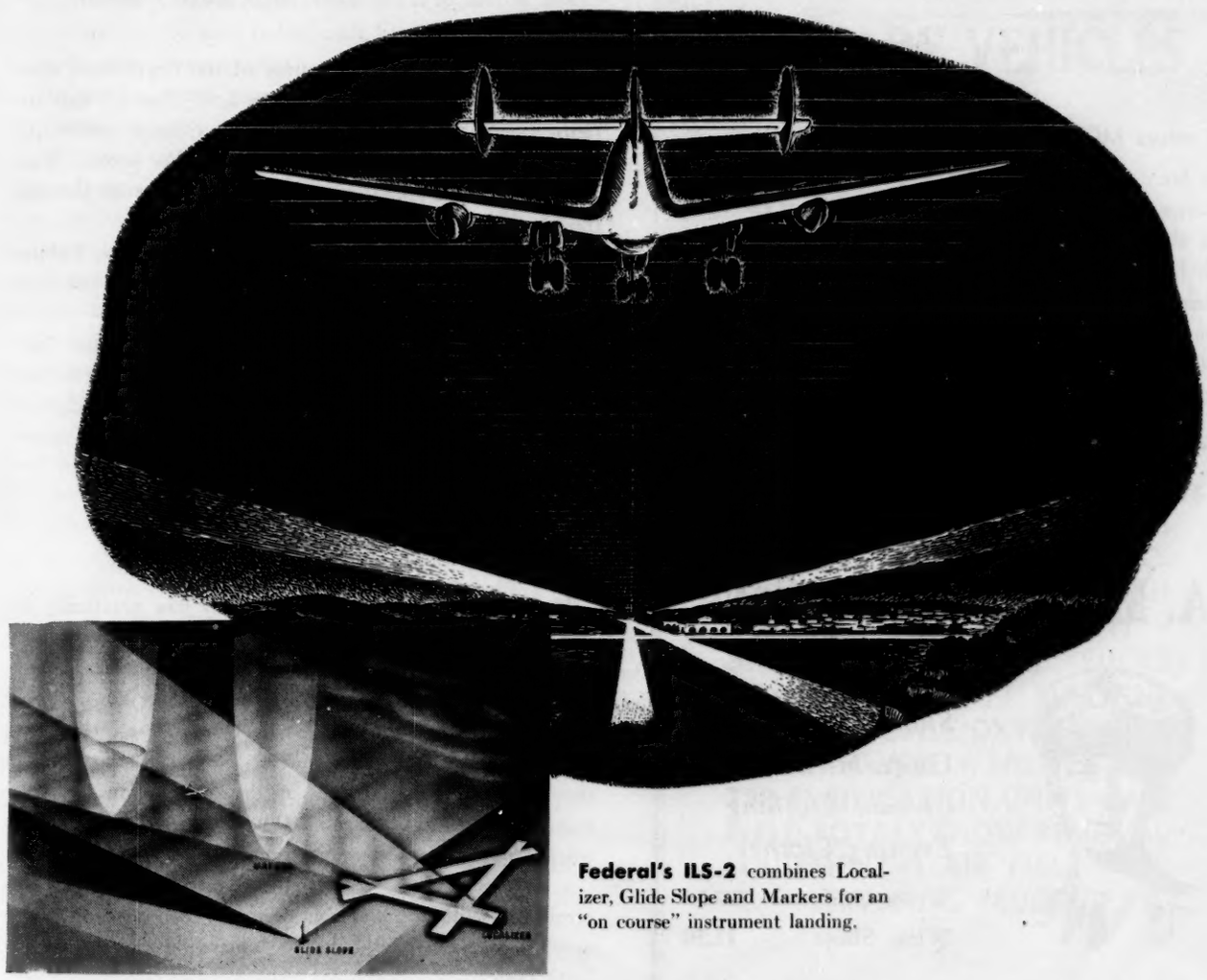
HOMEWARD PATH . . .

ILS-2 Contributes to Air Safety . . . Improves Operations

Today the landing of aircraft by means of the radio beam Instrument Landing System—known as the ILS—is a routine operation in important airports throughout the world. Accepted as standard equipment by national and international aviation bodies, the use of this system during the past winter has permitted many air operations which would not have been possible without it . . . operations which were carried out with safety . . . providing better service for the public, better income for the airlines. "Missed approaches"—the overshooting of the landing strip—are virtually eliminated with ILS. The I T & T version of this system—known as Federal's ILS-2—has been ordered and is being installed in many countries throughout the world. I T & T and its manufacturing associates have led in the development and manufacture of radio aids to navigation for more than 28 years.



Federal's ILS-2 combines Localizer, Glide Slope and Markers for an "on course" instrument landing.

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WORLD UNDERSTANDING THROUGH WORLD COMMUNICATIONS

Message Center

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with his first cry in this troubled world. In short you grow up a marine; that is why it is the service with all the color and traditions.

My idea is to break "the word" to these fellows who are about to become officers so they can get a good start. This word should be taught, just as Naval Courts and Boards, map reading, weapons, and the many other subjects taught in ROC.

What I mean is applied psychology—

Nice writing sergeant—

BENNIE E. EVERETT
Captain, USMCR.

FMs versus MCS . . .

DEAR SIR:

I trust you can give a number of marines in the Marine Corps the straight dope on a couple of points in question which have lots of gum-beating taking place. Here's the problem:

Point No. 1. Question—What is the correct procedure for cleaning the mess gear in the field? FM 20-10 (Military Sanitation) states *one* soapy, two clear boiling waters are used. MCS Basic Extension Course states the same but *Guidebook for Marines* states two soapy and one clear.

Point No. 2. Question—Per how many men is a Lyster bag issued? FM 20-10 states one Lyster bag per *100 men.* MCS Course B-5 states, one Lyster bag per *50 men.*

Please clear the above simple points so that many good marines won't be confused. Also let us know just what dope is considered to be official.

My guess is that the FMs and TMs are the straight dope.

Thanking you very kindly indeed.

JOHN LATTANGIO
TSgt, USMC.

P.S. FM on Army Instruction states an introduction to a lecture should be 2 minutes. MCS states 5 minutes. (50 minute lecture.)

ED.: Point No. 1—The editor of the *Guidebook* must have been at the end of the chow line. One GI can (or more usually, half an oil drum) of hot, soapy water and two of boiling, clear water are the rule. The second drum rapidly becomes soapy as anyone who has gone through the line knows.

Point No. 2—The USMC Table of Allowances, Volume II, allows one "Bag, canvas, water, sterilizing complete w/cover & hanger" for every 50 marines.

Point P.S.—MCS 2-6 in a sample lesson plan indicates a five minute introduction for a 50 minute lecture but there is nothing rigid about this. The introduction should be as long or as short as is necessary to introduce the subject properly.

Standardize the TAD System . . .

DEAR SIR:

The target area designation system is now practically the standard method of gridding military maps, however, many marines feel that the system should have one further step.

Presently the TAD system breaks the chart down to 200 yard squares. For example, a point located at 3192 Nan locates an area 200 yards square. Now depending on the standing operating procedure of the organization using the map we proceed to break this 200 yard square down in various ways. Among the more common methods used are:

a. Designate each corner by direction; e.g. northwest, northeast, southeast, and southwest. If the point to be located is in the center of the 200 square then we merely say 3192 Nan.

b. Measure or interpolate the X and Y distance and announce in tenths, e.g. 3192 Nan 4-8.

c. Assign each quadrant a number. For example start with the upper left hand corner and call it one; the upper right hand corner, two; the lower right hand corner, three; the lower left hand corner, four; and the center, five. Some units use this system but commence their numbering in the upper right hand corner and then continue around clock-wise.

All these methods are satisfactory and are quickly under-

stood, however, if the Marine Corps could adopt just one of them, and announce that only that one method would be used I believe there would be less chance for error in reading these maps.

REMMEL H. DUDLEY
Captain, USMC.

Basic Small Arms Training

DEAR SIR:

I believe that the present Marine Corps system of teaching small arms could be considerably improved upon by emphasizing the fact that the nomenclature and the theory of functioning are essentially the same for all small-arms.

The following is an example of this idea and while it applies only to the bolt the same system could be used advantageously on such other common parts as the trigger group, recoil mechanism for recoil-operated weapons, gas assemblies for gas-operated weapons, etc.:

"All small-arms have a bolt. This bolt, which serves the same purpose as a breech block in a heavy weapon, is actuated in its forward movement either manually or by a spring and in its rearward movement either manually, by recoil, or by gas pressure. The bolt serves to feed the round into the chamber and block the rear end of the barrel so that the projectile has to go forward upon firing; the bolt also extracts and in some cases ejects the empty cartridge case. As the bolt moves forward, its face pushes the next round in the magazine into the chamber (except in the BMG in which case the rearward motion of the bolt extracts the next round from the belt). Obviously something has to keep the bolt in position during the actual firing operation or it would be blown out to the rear as a result of the same pressure that drives the projectile forward through the barrel. This holding of the bolt in this position is called locking and is accomplished by engaging lugs on the bolt (locking lugs), with corresponding lugs (locking lugs), in the receiver either by a rotating motion or an upward movement. The firing pin, located in the bolt, is driven forward by the action of the hammer or striker (see trigger group), which detonates the primer located in the base of the cartridge. After the explosion, the bolt is moved backward either manually, by recoil action, or by utilizing the gas pressure. As the bolt moves to the rear, the extractor grasps the rim of the empty cartridge pulling it out of the chamber and the ejector then ejects the empty cartridge. The bolt moves far enough to the rear so that it can push against the base of the next round in the magazine as it starts its forward motion in the next cycle. The unlocking of the bolt is accomplished either manually or as the result of a distance gap in the recoil or gas action."

In this example an effective training aid could be used consisting of a model bolt that might be a combination of the bolts found in the BI, BAR, carbine, TSMG, and pistol and showing such common features as the bolt guides, extractor, firing pin, and ejector.

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Message Center

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Once the student has learned and understands this theory of functioning that applies to all small-arms, he could be instructed in the individual weapons themselves. I believe that this system will eliminate much of the confusion—particularly that in nomenclature—which now exists in the mind of the recruit who tries to learn a number of weapons at the same time. Another advantage is that since the marine should be familiar with and able to use all small arms he has not actually received any instruction in all these weapons, and he would at least have some idea by this teaching system as to how they work. As an example, a man just out of recruit depot who has received instructions to a large extent on the M1 and BAR but to a lesser degree on the carbine and pistol with no instructions on the TSMG; under the present system unless he is an exceptionally intelligent or conscientious man, he is incapable of picking up a TSMG and having at least some idea of how to operate it, because he has not been taught the theory. On the other hand a man who had received instruction in nomenclature and general theory of functioning before being schooled on any one weapon, would have a theoretical knowledge of the TSMG and as a result would be capable of firing it.

Another advantage would be that he could pick up and in a short period of time be able to use any foreign weapon that he might come across.

ROBERT C. BECKER
TSgt, USMC.

Second Lieutenants . . .

DEAR SIR:

Congratulations to the editors for rebuttal to Lt Kagan's letter. The juxtaposing of the two placed his remarks in proper focus.

Apparently Lt Kagan is unaware of the college education (formal) and length of service of lieutenants completing the postwar Basic Schools.

While the current class (5th) required only two years of college or equivalency, the fourth class had a minimum of four years and the sixth (commencing the latter part of this year) requires four years of college (according to Marine Corps Memorandum 36-49) or equivalency. Does this indicate that line officers are so ill prepared educationally speaking?

As Lt Kagan remarked, "Although statistics on line duty officers are not available, it is assumed that they would compare even less favorably since it is presumed that the Division of Aviation screens its officer candidates more thoroughly for their educational backgrounds."

This "assumption" which Lt Kagan "presumes" is fallacious for it is common knowledge that a flight officer in either the Air Force, Navy, or Marine Corps now needs a two year college education to get his wings. The *minimum* required by Headquarters Marine Corps for line duty officers since the war for Basic School is two years.

The disparity in education does not exist in reality, only on the paper Lt Kagan used to write his letter.

KARL D. MORRISON
2dLt, USMC.

Marine First Class . . .

DEAR SIR:

Amen to LtCol Heinl's suggestion that we get away from the present nomenclature for the top enlisted pay grades. It is all right on paper, but how many marines, officer or enlisted, vocally greet, address or refer to "Technical Sergeant Jones"? How many will say to a man wearing the second pay-grade insignia whose name they have forgotten or never knew, "Technical Sergeant, can you tell me where the CP is?" It all boils down to everyone above the rank of corporal being called "Sergeant" or even, God forbid, "Sarge."

While we are about it, let's do something for the sixth and seventh pay grades. A Royal marine does not sing about being "proud to bear the title," but from the day he is enlisted until he is promoted to corporal he literally does bear the title of Marine in front of his name. "Marine" and "Marine First Class" with capital M's are informative, prideworthy titles of rank for the members of the Marine Corps below non-commissioned officer status. And "Hey, Marine!" is certainly better than "Hey, you!", "Hey, Mac!" or "Hey Private!"

E. O. PRICE
Colonel, USMC.

Cover Picture . . .

DEAR SIR:

As a more or less constant reader of the GAZETTE, I think your—or should I say, *our*—magazine is in most respects excellent. Weakest point in my opinion are the photos you use on the cover. Can't you do better than the last several?

PAUL MCALISTAIR
Captain, USMC

ED.: The GAZETTE has no photo section of its own, must depend upon what it is offered or what it can find in the way of photographs. The offer of $25 for photographs suitable for the cover is still open but so far the submissions have been meager.

The Bottom of the Barrel

By LtCol Robert C. McGlashan

MAJ C. O. MARBACKS CHECKED THE MORNING REport lying in his basket and shook his head sadly. One officer and 19 enlisted less than his allowance of 164 men. Even when they were all present and available it was not enough—with a new guard post and two additional men he had to assign to the station's Ship's Service store.

He looked out of his office window to the parade ground. A depleted platoon was engaged in combat formations training—every last man that could be made available. At that moment the Major came to a long deferred decision! He wrote a letter to Headquarters; a carefully objective letter—well-composed, analytical, and sad enough to bring tears to the eyes of a quartermaster sergeant. All he asked was to be brought up to authorized strength—that an increase in allowance of only eight men. The CO of the station gave it a fine forwarding endorsement; ". . . even accepting a calculated risk, considers the present situation below acceptable standards for security. . . ." The District Commandant, while regretting that no compensating reduction could be made, ". . . strongly recommends favorable consideration. . . ."

After a lapse of five weeks the Major receives his answer and reads the doleful words, ". . . . critical shortage of personnel, cannot be approved." Maj Marbacks, at this point, probably wonders where they are hiding the other 74,836 marines that he can't have any of.

However, the Major shouldn't feel individually discriminated against. In the same mail that brought his letter to Marine Corps Headquarters were: a request from a major general commanding one of the Corps' largest posts for additional motor transport personnel; a letter from a three-star admiral to retain his Marine driver; and a despairing plea from the commander of one of our more tattered overseas stations for a few more maintenance personnel. All requests were "strongly recommended," all had more or less justification and all were disapproved!

Why?

Let's take a look at the situation on the receiving end of those letters—Marine Corps Headquarters. On the day before the Major's letter arrived, reliable evidence of a sizable prospective cut in the total strength of the Corps had begun to trickle down from high places to the "working" levels of Headquarters. With this cheerful background, Col Pinchbody, G-1, read the well-justified and cleverly phrased request of Maj Marbacks.

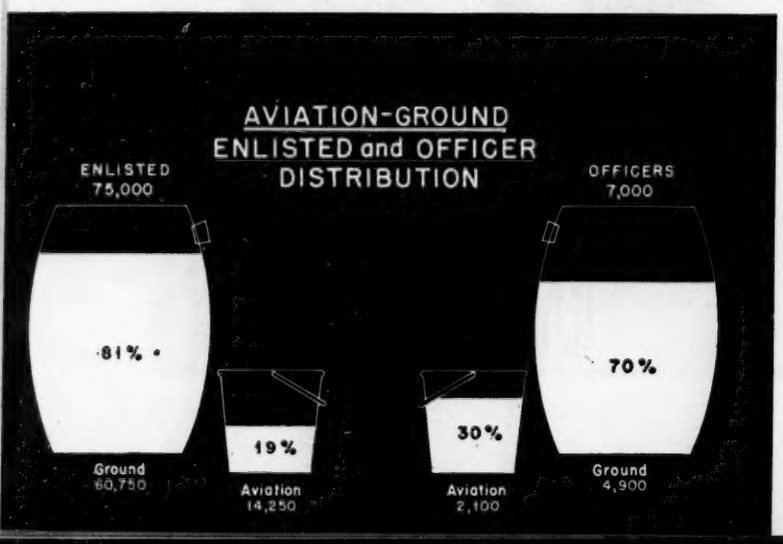
Contrary to a widely held belief, the Colonel did not cackle happily, reach for his pen and dash off a sneering disapproval for the Commandant's signature. He was confronted with the unpleasant alternatives of recommending disapproval or taking the men from some other deserving and equally hard-pressed post.[1]

Why should this dilemma exist in a Corps of 75,000 enlisted marines? Have we really scraped the bottom of the barrel? Suppose you sit in Col Pinchbody's chair and figure out what you would do with 75,000 men. But before you start giving all your friends a few hundred extra men each, you had better examine your irreducible commitments.

Prior to an examination of commitments, however, we must be clear on the meanings of the terms we will use. We are all familiar with the division of the Corps into Aviation and Ground components, or into FMF and non-FMF units (some permanent FMF habitués may not believe there is any "non-FMF," but there is!) For the purpose of personnel allocation planning, however, a more detailed breakdown is required.

Our first category, the Operating Forces, includes the Fleet Marine Force, the Security Forces (our traditional

Figure 1: When strength of Corps is 82,000, Aviation gets 30 per cent of officers and 19 per cent enlisted.



[1]Since the Chief of Naval Operations controls the distribution of Security Force Marines with naval shore establishments, the Commandant of the Marine Corps forwards such requests (with recommendations) to CNO. Any increases in individual station allowances must, as a matter of usual and necessary policy, be compensated by a reduction in another station within that naval district.

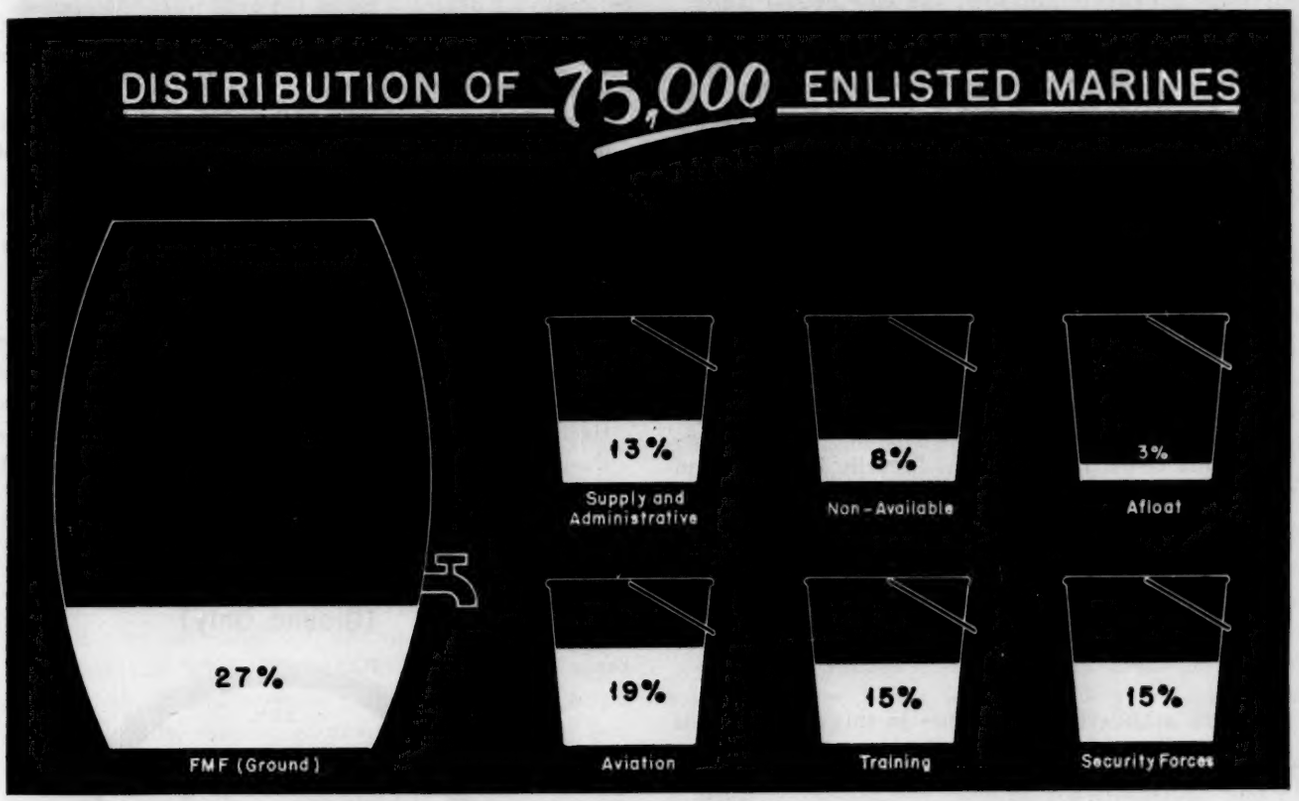


Figure II: Of the 75,000 enlisted men in the Corps, the Operating Forces which include the FMF, Security Forces, Ships Detachments, and Supporting Establishment must have their quota.

Navy Yard and overseas base interior guard detachments), and Ships Detachments.

All other activities may be grouped under a second category, the Supporting Establishment.[2] Two major functional groupings are readily apparent under the latter heading: (1) those activities concerned with training, such as the Marine Corps Schools and recruit depots; (2) activities concerned with supply and administration, such as supply depots and the recruiting establishment. The foregoing division applies to both ground and air.

A fundamental Marine Corps thesis is that the supporting establishment must be kept to a minimum in order to maintain our operating forces at maximum strength and readiness. That we adhere to this principle—almost to a fault—can be attested by any supporting establishment commanding officer. As G-1 you will be constantly aware of the implications of this guiding principle in your allocation of personnel.

Now that our definitions are straight, you can proceed with the distribution of your 75,000 marines.

FIRST, you must give Aviation its share of the total Marine Corps. Based on the recommendations of the Erskine Board, Aviation gets 30 per cent of the officers and 19 per cent of the enlisted men.[3] [See Figure I.] After the initial allocation between Ground and Aviation is made, you won't have to worry further about Aviation's share—but Aviation's G-3 will! (G-3 is charged with personnel allocation in Aviation). He will have to make a parallel analysis of his 2,100 officers and 14,250 enlisted, but for the sake of simplicity we will consider only the ground component, and of this, only enlisted personnel.

Turning now to the Operating Forces, logically you should consider next the Fleet Marine Force, since this is the largest and most important part of the Corps and, in fact, represents our major operating component, the *raison d'etre* for the bulk of the Marine Corps establishment. Fleet Marine Force requirements, based on emergency code plans and the Force Operating Plan, are the

[2]Regular Marines with the Reserve and on special assignments with the Navy are technically a third category but may be considered under this heading for convenience.

[3]A board convened to study the strength and composition of Marine Corps aviation. The Board's recommendations, as later modified, established a ratio to aviation of 30 per cent for officers and 20 per cent for enlisted when total Marine Corps enlisted strength is above 80,000. At reduced strength, aviation's enlisted share decreases by one per cent for each drop of 10,000 total strength.

As officer in charge of personnel allowances, G-1 Section, Division of Plans and Policies, HQMC, LtCol Robert C. McGlashan is well qualified to write this article.

determining factor governing the size of the Marine Corps. However, this "optimum" FMF must, of necessity, be modified by the demands of our other operating forces together with continuing requirements for supply and administration.

So, while you are inclined to dispose immediately of the FMF with, say, two full strength divisions, plenty of supporting services and Force troops, Col Pinchbody's kibitizing, "Better hold up on the FMF until you have looked over the whole picture," will probably be heeded. Keeping in mind the minimum FMF requirements that must be met, you turn to another of our operating forces, the Security Forces.

YOUR COMMITMENT for the Security Forces is firm and varies little from year to year. Just turn 11,000 men over to the Chief of Naval Operations who will divide them up among the Naval Districts, River Commands, and overseas area commands. The latter, in turn, will allocate their share to individual stations within their commands.

THE ALLOCATION of Marines to ship's detachments is much the same. CNO receives an allocation of Marines to provide for all ships to which detachments are assigned. You will also want to set aside additional personnel for prospective ship commissionings during the fiscal year for which your plan is made. 2,000 men will take care of Marines afloat.

NEXT you will have to consider the Marine Corps Supporting Establishment, having finished, for the time being, with the Operating Forces.

Turning first to the training ceiling, you must estimate your expected recruit load for the year. This figure is the number of recruits in training at any time, leveled off to provide a uniform input for the year. Your estimate must include enough recruits annually to replace about one-third of the total enlisted strength of the Corps, assuming an average three-year enlistment, (plus about eight per cent normal attrition annually aside from expiration-of-enlistment discharges). On the credit side of the ledger will be found a factor of about 30 per cent, accounting for those men who will ship over, either upon expiration of enlistment or after a period of civilian life. In either case, recruit training will not be required for these men, hence need not be included within your recruit load figure. After considering all these factors, your recruit load will amount to 5,870 men.

Having arrived at your recruit load, you can now compute the overhead requirements for this load at the two recruit depots, assuming that perhaps 70 per cent of the new men will live east of the Mississippi and will, therefore, receive their recruit training at Parris Island. This latter computation is necessary because, as a result of local conditions, the overhead requirements of the two depots differ.

Beside the recruit load and overhead, you must now derive your in-training load of students in specialist schools. To this add the enlisted overhead required to staff both enlisted and officers' schools. You will arrive at a figure for students in training of 1,500, and a training overhead of about 4,000.

THE REMAINING REQUIREMENT under the Marine Corps Supporting Establishment, after training has been disposed of, consists of personnel for activities such as Headquarters Marine Corps and Department of the Pacific, depots of supplies, post and station overhead,

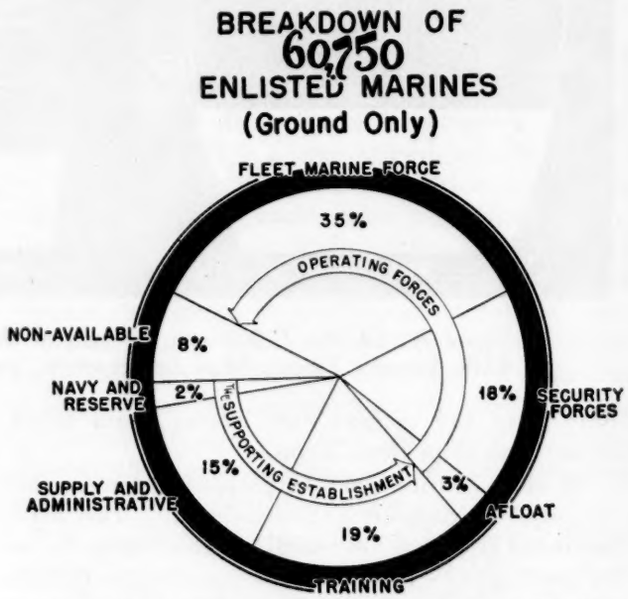


Figure III: Out of a Ground strength of 60,750 enlisted men, the FMF actually gets only 21,470.

the recruiting field establishment, and minor activities. Some of the latter include such varied assignments as Escorts for Deceased under the Return of the Dead program and Area Disbursing Offices. There is no easy way to compute the requirements under this heading—each activity must be evaluated separately. It is here that you will have to cut to the bone, as this is the only place that any personnel can be saved—everything else is irreducible. Upon investigation you will find that most of the supporting activities are already down to the barest minimum necessary to accomplish their mission—there is little fat here. Even with the closest scrutiny you will arrive at a figure in excess of 9,000 for the supply and administrative portion of the Supporting Establishment.

YOU have covered most of the major Marine activities, aside from the FMF, but you must make still other

deductions. You have not as yet considered the Marine Corps Reserve. Regular Marines needed for the administration and training of our Reserve component will number about 600 men. In addition, we have about 450 men on special assignments with the Navy—i.e., at the Navy Department, as instructors at Navy schools, Troop Training Units, etc.

Now that every major category has been considered, it appears that you can assign the unexpended balance of 26,330 men to the FMF.

A nice idea but it won't work!

This plan would work out to perfection if every man was available at all times for the assignment that you have planned for him. The "gimmick" in this (as circusmen would say) is that, at any time, between eight per cent and 15 per cent of the Marine Corps is either en route from one permanent station to another, hospitalized, on leave, etc.[4]

You must plan for this non-availability factor, or else all your categories will end up short of the figure you have just blocked out. Obviously, your planned non-availability will never be exactly equal to the actual non-availability existing at any given time. The best you can do is pick what you hope is an average non-available factor. It is when the actual non-availability appreciably exceeds the percentage you have allowed, that Maj Marbacks has his troubles. While there are enough men to go around as long as the factor is not exceeded, when it is exceeded many activities will be short of their authorized allowance.

YOU MAY BE SURPRISED at the size of an eight per cent non-effective factor in a 75,000 man Marine Corps—6,000 men. And this—many observers will tell you—may well be unrealistically low.

So here you are, back to the FMF again . . . and the figure you can actually turn over to the ground FMF—21,470 marines—count 'em, 21,470! Out of a ground strength of 60,750—not very impressive, is it? [See Figure II.] Perhaps, you had better go back over your plan and see where you can save in order to increase the size of the FMF to something approaching a respectable operating force. [See Figure III.]

You might ask CNO for a reduction in the Security Forces. If granted, this may save 500 or 1,000 men. However, it must be remembered that the mission of guarding the Naval Shore Establishment is one of the Marine Corps' statutory, as well as traditional, missions.

Consider the training establishment. A reduction in student load or training overhead is possible. Bear in mind, though, that any reduction in training necessarily results in a shortage of specialists for the supporting establishment and the Fleet Marine Forces. And just picture the indignant, if justified, protests from Quantico should you cut down the Marine Corps Schools by even one man. No, their training and development mission is too important for any penny-wise pinching here.

Careful scrutiny of other activities in the supporting establishment may reveal small savings here or there, but in general the supporting establishments are operating at the barest minimum compatible with operating efficiency. In fact, in the case of Camps Pendleton and Lejeune, the Fleet Marine Force units present must contribute overhead personnel to supplement the pared-down post and supply troops.

IN THE CASE of the Reserve, an increase rather than a decrease is more likely in view of the expanding size of the reserve component. A few men might be picked up from special assignments with the Navy; however, no appreciable savings will result from this source. Also, most of these billets are of considerable value to the Marine Corps.

Returning now to Marbacks, you can realize that the disparity between his morning report strength and his authorized allowance from a temporary excess in the overall Marine Corps non-availability factor over that planned. This will correct itself in a month or two when the ineffectives revert to a normal percentage.

But what about the eight additional men that the Major requested? Are you going to take them from the FMF?

And what about the similar requests that will be made tomorrow—and the next day? Are you going to reduce your fighting potential for each one? Individually they are small; collectively they mean a platoon, a company, or a battalion less in the combat units.

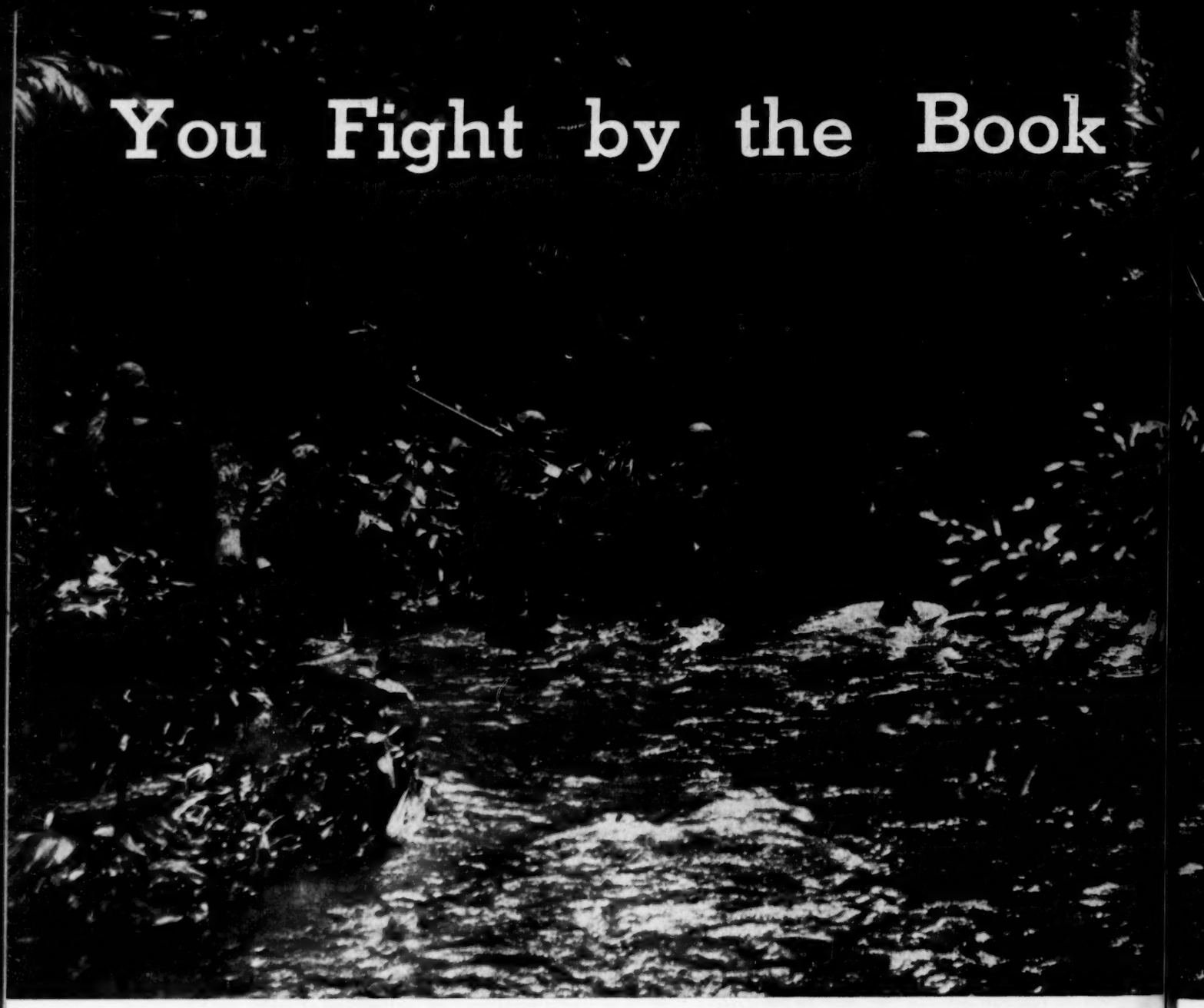
Consider these facts: In one week in February 1949, for example, increases totaling nine officers and 33 enlisted were authorized for training, supply and development activities of the Supporting Establishment. They were all necessary—but ultimately they will all come from the FMF. If the same number of requests were approved for 52 weeks we would lose 468 officers and 1,716 enlisted combat marines from the FMF—more than three new peacetime battalions and a third of present FMF officer strength!

So Maj Marbacks is refused his eight men; the admiral loses his driver; the colonel is apprised that he can have his small band—but only on an additional duty basis; and the overseas station becomes a little more dilapidated for lack of maintenance personnel.

You can't get any deeper than the bottom of the barrel. US MC

[4]This "non-available" factor is in addition to the unit "non-available" consisting of short-term sickness in local dispensaries, leave during a tour (as distinguished from delay between stations), in station brigs, etc.

You Fight by the Book

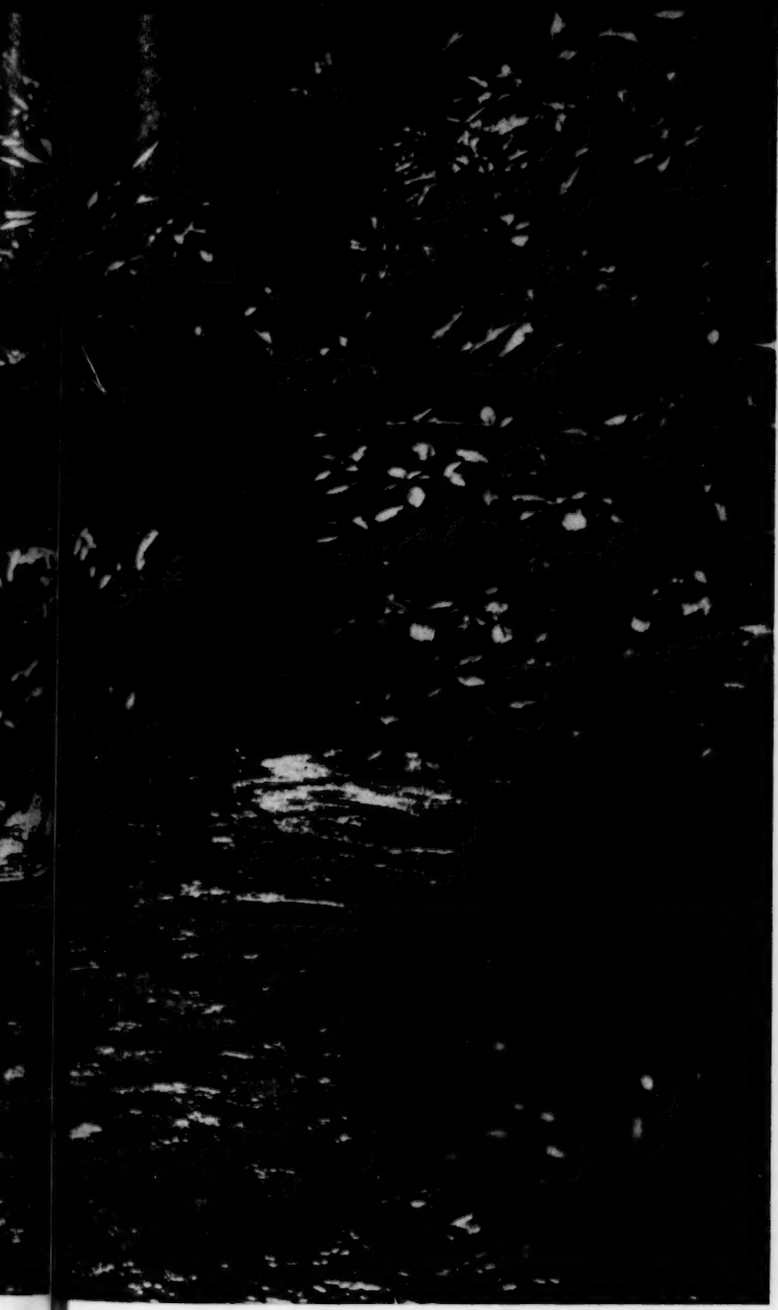


WE OFTEN HEAR THE COMMENT THAT "FIELD MANUals are well and good but when the fighting starts you throw away the book." Or, "that may be what the book says but this is the way we did it at so-and-so." One book so maligned is Field Manual 100-5, better known as the Operations Manual, the "pappy" of them all in regard to tactics. But, like it or not, sooner or later we have to face it: the fundamental combat doctrines contained in FM 100-5 are a sound basis of instruction for all arms and services.

It is a somewhat common belief, particularly among junior officers, that this manual is too general in statement, too "high level" to apply to small units. But, again, if we choose any successful operation, regardless of size, and analyze it with regard to the application of these fundamental combat doctrines, it soon becomes apparent that success was assured by the practical application of said doctrines.

One such small unit operation was conducted by the 4th Marine Raider Battalion during the attack and seizure of New Georgia, Solomon Islands. Viru Harbor, a little known harbor on the southeast coast of New Georgia, was desired by the Navy for use as a PT base. At that time our PT boats were active not only against enemy inter-island craft but also in bolstering our growing Navy in its actions against enemy fleets moving down "the slot," that ocean channel running between Choiseul and Bougainville, and New Georgia and Guadalcanal. The Japanese knew of Viru Harbor's importance; in fact, they had used it for some time as a staging area for barges and submarines.

By Maj Roy J. Batterton, Jr



Viru was reported by our aviators as having plenty of light AA and at least one shore artillery piece, a 3-incher or bigger. Also, natives (through the Australian coastwatcher, Mr Kennedy) had reported the frequent arrival of submarines and barges. Kennedy believed the garrison to consist of a Japanese Naval Landing Force detachment varying between 50 and 100 men.

To gain further information, several small amphibious patrols were flown by PBY from the base camp at Guadalcanal into Segi one night about a month prior to the scheduled operation. Segi was an old coconut plantation on the southeast tip of New Georgia where coastwatcher Kennedy maintained his headquarters. It was a fairly secure locality due to its remoteness from areas of importance to the enemy. One of the amphibious patrols commanded by 1stLt Malcolm McCarthy (now Captain USMCR) had the specific mission of collecting information about the Viru garrison, armament, and accessibility to the area, both by way of direct attack up the harbor cliffs and by inland native trail through the jungle.

This patrol upon its return to Guadalcanal reported that the enemy had between 75 and 200 men at Viru, with the great majority located on the west side of the harbor (Tetemara). Numerous 50 cal. machine guns in fortified positions overlooked the harbor and sea approaches. A sea-coast gun, estimated 3-inch, guarded the harbor mouth. The cliffs on the seaward side were practically unscalable—being about 100 feet high and patrolled. They further reported that the inland native trail, though extremely hard going, was passable from Segi to Viru and was unprotected by the Japs except for sporadic patrolling. The vicinities of Humba and Choi River were recommended as approaches for rubber boat landings.

From the information now available it was decided by higher authority to send two companies to capture Viru. The plan was to stage at Segi, approach Humba or Choi River by rubber boat under cover of darkness, land, and then proceed overland to attack Viru from the inland side.

D-Day for New Georgia was 30 June 1943 and the original plans specified that the 4th Raider Battalion (less N and Q companies) would land at Segi on 26 June in order to have time to proceed overland and arrive at Viru on D-Day. However, on 20 June an urgent message was received from Kennedy to the effect that Japanese patrolling had increased and he could not assure the security of Segi without reinforcements. It was now made known that Segi Point was to be held at all cost so that construction of an air strip could proceed without harassment prior to D-Day.

So, things were speeded up and on the night of 20 June 1943, O and P Companies and Battalion Headquarters of the 4th Marine Raider Battalion embarked aboard the APDs *Dent* and *Waters* with rubber boats, rations, and ammunition. It was a fast trip from Guadalcanal with the ships standing off New Georgia the next morning

It is a common belief that when the fighting starts you throw away the book. But, like it or not, we have to face it: the fundamental combat doctrines contained in FM 100-5 are a sound basis for instruction for all arms and services

about daybreak. The ships were strafed during the night by an enemy plane but no casualties were incurred. As the ships were feeling their way through Panga Bay to an anchorage off Segi Point, just before dawn, the marines were quite concerned about fires which appeared off the ship's bow, until the battalion commander, LtCol Michael S. Currin, passed the word that the fires were set by Kennedy's natives to give a warning of any ships coming in the channel.

The battalion was met on the beach by Kennedy. He said that Jap patrols were growing bolder and had frequently been as close as Nazareth. He and his native gendarmery had ambushed one patrol but some had escaped. He had also captured a Jap landing barge and killed the occupants.

A beach defense was quickly organized against possible Jap barge landings, the key terrain feature was occupied, and a mobile reserve was located in defilade.

Immediately after this, the colonel conferred with Kennedy, procured some of his best native scouts and dispatched a reconnaissance patrol along the native trail in the vicinity of Nazareth.

Para. 286, FM 100-5: Counter-reconnaissance is employed on fronts where it is especially important to conceal the disposition of troops from hostile investigation.

The patrol returned several hours later and reported that no enemy were encountered but signs of their recent presence were noted.

In addition to daily foot patrols, amphibious reconnaissance patrols were sent out in preparation for the approach march to Viru.

Para. 206: The nearer the approach to the enemy, the more intensive the reconnaissance. The most detailed information will be required concerning areas of importance.

THE AMPHIBIOUS PATROLS were sent via native canoes to Humba, Regi, and up the Choi River. One such patrol consisted of a movement at dusk, by canoe, up the Choi River to where the Jap trail crossed. At one point the patrol heard Japs talking loudly and cutting in the bush, but eased by without incident. This patrol was to consider the feasibility of moving up the Choi by rubber boat to the Jap trail and there disembarked to proceed overland to Viru. Due to the frequent evidences of Jap activity and the narrow confines of the river this scheme was ruled out.

Other patrols disclosed: that Humba was posted with sentries; that the inlet to Mohi and Lakuku Rivers was impassable; and that a 20-man enemy patrol had been moving between Choi River and Nazareth. On 27 June one of our reconnaissance patrols reported the enemy patrol again moving east from Regi toward Nazareth.

From this information LtCol Currin changed the original plans of landing at Humba or up Choi River and decided to land at Regi that night, 27 June.

Para. 130: In any operation, the commander must evaluate all available information bearing on his task, estimate the situation, and reach a decision.

As was previously requested by the colonel, two companies of the Army's 43d Division arrived on the afternoon of 27 June. All defensive positions were turned over to them.

WORK NOW BEGAN in earnest for the approach and attack of Viru. Rubber boats were inflated; ammunition, water, and rations issued; and the boat teams organized.

Kennedy called in all his native gendarmes and their canoes and had them stand by, selecting the best to serve as guides. The rubber boats were divided into four groups and each group commander was assigned one of the chief guides and a canoe manned by natives. The battalion staff was to lead the groups in two large war canoes. The landing was to be kept secret by having the natives collect the rubber boats after the battalion was ashore, take them in tow, and return to Segi.

LtCol Currin held a meeting of all officers and gave a summary of the situation and plan.

Briefly, the plan was:—to proceed overland from Regi to Point (X) south of Viru River where 1st Platoon, Company P, would separate from the battalion column and proceed to attack and seize Tombi (the village on the east side of Viru Harbor); the battalion (less 1st Platoon, Company P) would then continue to march on the original trail, cross the Viru, Tita, and Mango Rivers, and attack and seize Tetemara (the village on the west side of Viru Harbor). Details of coordinating the attack would be prescribed after reaching Point (X).

The colonel finished by saying: "We've got to capture Viru and we can expect no help until we knock out that coast artillery piece defending the harbor entrance."

As darkness settled, at 2000, the rubber boat movement to Regi began. Regi was eight miles up Panga Bay, which was a long hard pull by rubber boats, but it was estimated the battalion should arrive about 2400.

It was a weird moonless night with black rubber boats on black water slipping silently through the many islets of Panga Bay. The trip was uneventful except for one scare. It came just before reaching Regi, while lying off shore waiting for word from native scouts who had gone ahead to make certain no Japanese were in the village. Due to the sudden appearance of a half moon which began to cast a sickly reflection, a small island appeared to be an enemy destroyer. The native guides quickly gave assurance that it was indeed an island.

The scouts returned and reported all clear, and the convoy proceeded to land. By 0100 all had landed, a perimeter defense was established, and the natives had departed for Segi with the rubber boats in tow.

At dawn on 28 June, the battalion moved out in a column of files led by native scouts. O Company fur-

nished the advance guard followed by Headquarters Company, followed by P Company which furnished the rear guard.

Para. 958: On jungle operations, in general, units will move in column of files adequately secured and alert for last minute employment into line.

That day the battalion covered about six miles. Every foot was a struggle. Immediately outside of Regi a two mile mangrove swamp began. This sweating column of men, over a half-mile long, was a bit different from a few natives and a small Marine reconnaissance patrol moving over "good trails."

After three hours of silence broken only by sucking mud, the first Jap contact was made by the rear point. These Japs were presumably a part of the patrol operating between Regi and Nazareth which had been reported the previous day. Although the firing included the staccato chatter of machine guns, the column moved on, depending on the rear guard to handle the trouble.

Capt Anthony Walker (now Major USMC), company commander of P Company and commander of the rear guard, came running up the column about 20 minutes later to report on the firing we had heard. He confirmed that the Japs who had hit the rear point must be the patrol which had been operating between Regi and Nazareth. After the Japs had been routed and the skirmish finished, he sent a native scout back through the jungle to determine how many there were. The native returned and reported that they numbered about "four hands" (20 men). He said they were apparently surprised by our rear point. Four of the enemy were killed with no casualties to our men.

ABOUT AN HOUR LATER the rear point was again engaged. This time, however, the news was not so good. The rear point, moving by bounds to cover the movement of the column, was surprised by the Jap patrol moving in from an obscure side trail. Five of the six men making up the rear point failed to return to the rear party. The one man who got away said they were cut off from the column and had to take to the bush and swamp in order to escape. He said he didn't know how he did it but he became separated from the others and rejoined the rear party. He believed the others had escaped but didn't think they would be able to get back to the column. He was sure that they had killed three or four of the Japs.

LtCol Currin said, "Well, they will probably turn up back at Segi," and later they did. After taking Viru word was received that Sgt John F. Sudro (killed on Okinawa) had managed, under the cover of darkness, to get the other four men out to Panga Bay where they found a native canoe and made their way to Segi.

The movement of the battalion column on the correct trail dependent almost entirely upon the guidance of the native scouts. To us a "trail" in the true sense never existed except when we traveled on the Jap-cut trail. Even the natives fell to jabbering among themselves several times about which route to take.

By nightfall, around 1700, the battalion had reached the Mohi River where a tight perimeter defense was set up. Now we had our first meal of K Ration, filled our canteens, and washed in the river. It began to rain, and continued to rain throughout the night, as we crouched miserably under our ponchos. Sleep came, more as the result of sheer exhaustion than from a natural desire for rest.

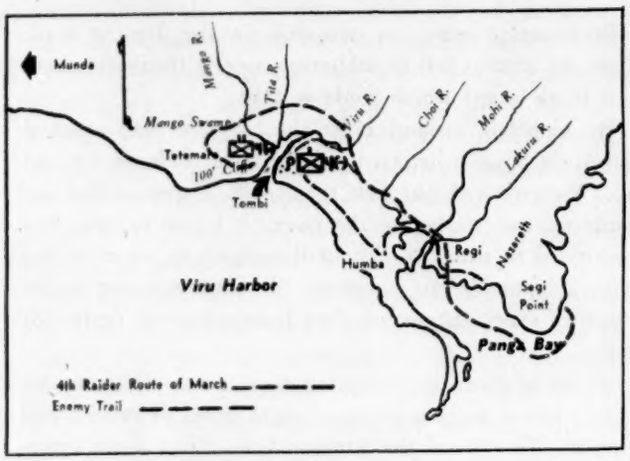
Again at dawn the battalion moved out. This day we would travel another seven or eight miles of swamp and jungle. We crossed the winding Choi River three times.

ABOUT NOON the rear party had just completed the first crossing of the Choi when they were ambushed by a strong Jap patrol. It was probably the same patrol that had dogged our trail the previous day, but there was no way of knowing. As the main body moved on, the firing increased in volume. We could hear machine guns, grenades, and what sounded like mortars or demolitions. After about 20 minutes the colonel took his runner and started back the column to investigate. Enroute he ran into Walker. Both proceeded to the end of the column where a messenger from Lt Brown met them. He stated that Lt DeVillo's platoon was engaged with about 20 Japs, but everything was under control and it shouldn't take long to clear them out. By this time all radios had long ceased to operate. The colonel had Walker send a squad back with the messenger to assist DeVillo, and started the column moving again.

After an hour no more firing could be heard. The battalion continued to march until dusk when the Choi River was crossed for the third and last time. Here the bivouac and perimeter defense was set up for the night. Needless to say, after crossing the same river three times, traversing even worse swamps than on the previous day, and being harassed by enemy ambushes, spirits were lagging. By this time the battalion staff realized that they could not reach the objective by the next day, 30 June. Remember, D-Day for New Georgia was 30 June.

THE COLONEL called the communication officer, Capt Floyd M. Johnson (now Major USMC), and had him again set up the TBX to attempt to contact higher headquarters. He had tried twice previously during the day with no result. Again no contact could be made, or at least no answer was received. The colonel's orders at this time were as expected. He said, "You know that our mission was to attack and seize Viru Harbor tomorrow. We will not be able to meet that schedule, but in the absence of orders we will continue the march and execute the attack day after tomorrow."

Para. 125: The commander's mission is contained in the



The route of march to Viru harbor included mangrove swamps of sucking mud, jungles, and the Choi River.

orders which he has received. Nevertheless, a commander of a subordinate unit cannot plead absence of orders as an excuse for inactivity. If the situation does not permit communication with the superior commander and the subordinate commander is familiar with the general plan of operations or the mission of the whole command, he should take appropriate action and report the situation as early as practicable.

By now the jungle was an inky black, and Lt Brown had not reached the bivouac with his men. We decided that they must have stopped for the night and would catch up the next morning. However, about 2100 we heard a commotion on the trail and in they came.

They were exhausted but bore the enthusiasm of victory. Lt DeVillo told his story: "Well, Colonel, remember the first crossing of the Choi where the Jap trail cut off to the left? If you recall, there was a high ridge on the left there which dominated our trail just before it took that sharp bend to the right. That's where they hit us. We were a little behind, having just crossed the river, and I guess that's what they were waiting for. They had machine guns and the way they had us bore sighted there was nothing for us to do but go right up that ridge after them. As soon as they opened fire two of my men were killed, then we got off the trail into the bush. We didn't waste any time. I kept the 1st squad in position for covering fire and took the other two squads up the ridge by infiltration. I guess we must have taken a little over an hour to clean them out but I don't think more than two or three got away.

"WE FOUND 18 dead Japs. Three more of my men were killed and Steve Klos (a fire team leader) got a slug in the leg. We buried our dead and marked the graves."

"Fine work, DeVillo," said the colonel. Turning to Capt Walker, he remarked, "Your rear guard seems to be catching everything so far. I hope tomorrow will be easier because we have a long way to go."

Para. 245: A command moving within the theater of operations secures itself by a rear guard, a fraction of the command which follows the main body in the zone of march, usually by bounds, for the purpose of protecting it from attack or interference by hostile ground forces.

We had another night of rain and arose early to move out at dawn. Today we were to cover another seven miles of heartbreaking terrain. This was to be the worst day of travel but fortunately there were no more contacts with the Japs. Presumably, any remnants of the enemy patrols had moved down the trail of Humba and on to Tombi.

WHEN THE BATTALION reached Point (X) the colonel called a halt for a final conference preparatory to sending the detachment to Tombi. Looking around at his assembled officers, he said, "This is the parting of the ways. However, after sizing things up, especially the rear guard actions in the last two days, I have decided to send *two* rifle platoons to Tombi instead of one."

Para. 130: Estimation of the situation is a continuing process and changed conditions may call for a new decision at any time.

"From the information we had before starting on this operation we can assume that there are anywhere from 75 to 200 Japs defending Viru Harbor. During the past two days we have been engaged with two forces estimated each time at about 20 men. We don't know whether this was the same force or two separate forces. At any rate we can be pretty sure that those at Viru have the word we are on the way. The natives all say that no Japs and few natives have ever taken the route north around Viru Harbor to Tetemara; it is considered impassable. With all of these factors in mind it is reasonable to suppose that the Japs may reinforce the normal detachment guarding Tombi."

The colonel continued: "Tony, the two platoons going to Tombi will be from your company, who are you going to send?"

Walker said, "DeVillo and Bob (Lt Robert J. Popelka, now Captain USMC)."

"Good," said the colonel, "I want you, Tony, to go with these two platoons. You'll be in command." With this, the colonel went on to give a complete order to Capt Walker, in which he specified that the attack on Tombi would be carried out independently of the main attack on Tetemara, beginning anytime after daylight the following morning, upon location of the enemy. Two native guides were also assigned to Capt Walker.

We could hear Tony and his men moving out along the side trail as our column began the march anew.

THROUGHOUT THE DAY no more enemy contacts were made. About mid-morning we crossed the Viru River. By noon we reached the Tita River and halted for a rest. The terrain had been very mountainous and the going was beginning to tell on the men carrying heavy loads—so much so in fact, that the natives carrying some of the mortar and machine gun ammunition re-

fused to go any further unless relieved. We were relieved to hear chief guide Pratt (who spoke perfect English having been educated in Australia) say that after the next ridge there would be no more mountainous terrain. Little did we know.

There was only an hour of light remaining as our long column broke out of the bush onto the banks of the Mango River.

THIS WAS A FORMIDABLE looking river, by far the biggest yet. It was 50 yards wide, swift, and so deep that even the tallest men went under midway across. There was no time to make any fancy rigs. All we could do was hold hands and start across. Miraculously the human chain held. By the time the entire column had crossed darkness had almost fallen. Still, we had to go on in order to be on high ground in preparation for moving to the attack the next morning.

Now began four hours of what could have been a scene from Dante's *Inferno*. The Mango Swamp was every bit as ghastly as we had been led to believe. The water was from knee to waist-deep. Under the surface were snakelike roots by the millions. Under the roots was bottomless black mud. By the time we had gone a short distance it was pitch black. We were holding on to one another, moving by inches. The colonel halted the column and conferred with the staff. He said, "We've got to do better than this. These men are too tired to hold on to each other stumbling and falling through this swamp. Besides we're not making any time. Somebody's going to get lost."

Chief Guide Pratt then said, "Colonel, allow my people to go and gather *tree light* and we can go faster and no one get lost." Tree light was the phosphorus glow present in some decaying jungle vegetation, usually rotting tree trunks. He said, "There was some back where we crossed the Mango River."

The colonel said, "All right, just leave me one scout so we can keep moving."

SHORTLY THEREAFTER, proving how incredibly fast a handful of natives can travel in such country, up came Pratt and his men loaded with armfuls of tree light.

As the column staggered past, the scouts handed each man a chunk of the luminous wood. The column began to move along at a better speed. Still, it took us four hours to cross those two miles of swamp. Without the natives we would never have made it.

But it was not over yet. Before us, as we emerged from the slime and filth of the swamp, lay a half mile of climbing to reach the ridge were we were to bivouac in preparation for the morrow's attack.

The last 100 yards were almost vertical, and the muddy trail was as slick and greasy as a toboggan slide. Crawling on hands and knees, the men literally fought to reach the ridge. Time after time a few would get within yards of the crest, then the leading man would hit a slick spot and tumble the whole lot to the bottom. Sliding men smashed against machine guns, rocks and trees, and other men.

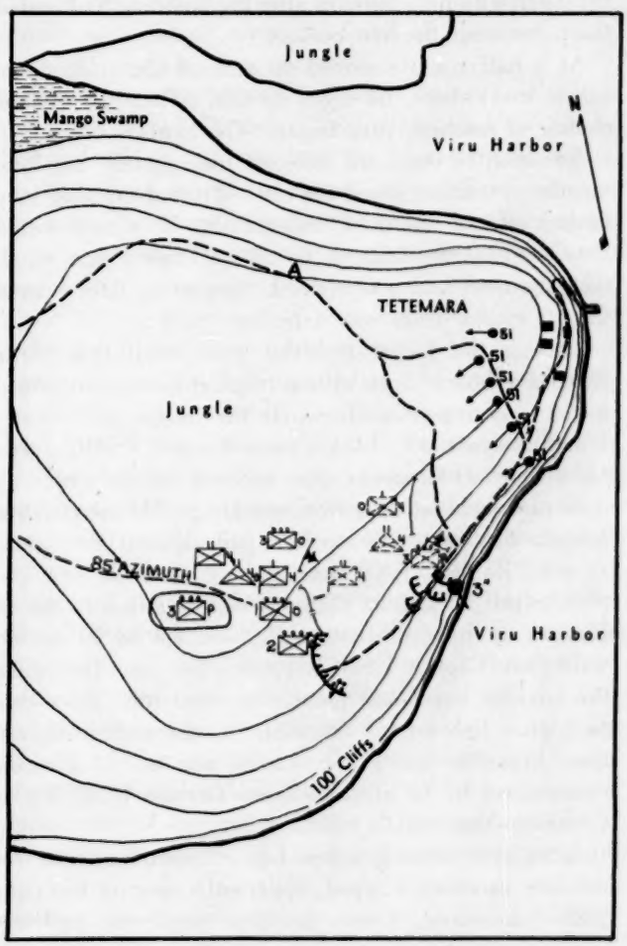
Finally we crawled over the crest and fell exhausted on both sides of the trail.

At dawn, 1 July, we moved out. By 0845 we had completed the encirclement of Viru Harbor and were moving due east. Though this was the beginning of the fourth day since departing Segi the men moved with a new alertness, because in minutes or hours they knew they would face the test for which they had been trained.

About this time we heard machine gun and small arms firing which sounded as though it might be Walker at Tombi. This was the beginning, soon it would be our turn.

AT 0900 we heard planes overhead. The question was, were they ours or the Japs? Then we heard the explosion of bombs and felt the tremors. They were bombing Tetemara. They must be our planes, and yet, we had

Map of final assault. Machine guns broke the back of the Banzai charge; the 3d platoon moved in on the flank.



no plans for air support in our orders. Besides we were a day off schedule and higher headquarters didn't even know where we were. Our only hope was that, Jap planes or ours, they hadn't bombed Walker and that they would be gone before we commenced the attack on Tetemara.

Col Currin said, "Which ever it is we've got a job to do, so let's go do it."

We moved on. After about 20 minutes the last bomb had fallen and the planes could be heard no more.

Para. 126: In spite of the most careful planning and anticipation, unexpected obstacles, frictions, and mistakes are common occurrences in battle. A commander must school himself to regard these events as commonplace and not permit them to frustrate him in the accomplishment of his mission.

Later we found that the firing we had heard was Walker attacking Tombi, and that the dive bombers had been ours, sent out by a worried higher headquarters on the slim hope of helping us if we were facing too strong an enemy.

TIMING probably couldn't have been more perfect if planned. Walker's firing in Tombi drew the Japs of Tetemara out in the open and then our dive bombers started on Tetemara driving the Japs to the west away from their prepared positions into the jungle—toward us. Then within 15 minutes after the bombing had ceased the point made the first contact.

At a half run we moved up and off the trail, dense jungle everywhere, no signs of life. Then the vicious chatter of machine guns began. The battle was on.

Two men in the point were hit immediately, but long months of training saved the rest. Without thinking they fanned off into the thick underbrush. More men would have died in the point if the .30 cal. Lewis gun which the Japs used had not jammed. Inspection later proved the 50 round drum was defective.

Though the forces involved were small this battle lasted five hours. Intermittent tropical downpours added to the ever present confusion in the jungle.

1stLt Raymond C. Luckel (now Captain USMC), who commanded O Company (the advance guard) which up until now had seen no action, quickly guided his platoons into the fire fight. His machine gun platoon (four guns, as per "Raider" T/O) was already attached, one gun each to the 1st and 2d Platoons and a section to the 3d Platoon in support. His 1st Platoon, led by Lt Anderwald (now Captain USMCR), which had been furnishing the advance party and point, was committed upon contact, on a line astride the trail. As the enemy dispositions began to take shape, Luckel sent his 2d Platoon, commanded by Lt Stebbins (now Captain USMCR), to tie in on Anderwald's right.

After over-running a few Jap outguard positions the advance suddenly stopped, apparently meeting the main line of resistance. Enemy machine guns could be heard on both flanks and knee mortar shells began to fall throughout the area.

Col Currin moved the CP on up the trail to the last point in defilade from the fighting. He then took his messengers and went forward to contact Luckel and learn the situation. The front was extended over about 150 yards now and in very thick rain forest. Fallen trees and dead tree stumps increased our protection but at the same time aided the Jap defense.

Advance was slow and sporadic. Instead of a continuous battle, there developed a series of little fire fights lasting from a minute to 15 minutes at the most, with long periods of silence between. Friend and foe were each attempting to locate the other without giving away his own position. An enemy machine gun would open fire somewhere ahead and our guns would take it up, the jungle resounding with their chattering roar. For minutes all hell would break loose. Then suddenly, the guns would stop and the jungle would be still again. Not a sound but the intermittent rain. Not a movement to be seen anywhere.

AFTER AN HOUR OF THIS, the advance had progressed only about a 100 yards. The enemy's right flank appeared to be extending; this was evidence by loud jabbering and an increasing amount of small arms fire from that direction. There was a strong possibility that they were attempting to outflank our line. Luckel decided that it was time to move, so he left his 1st and 2d Platoons in position to hold the enemy with fire while he pushed his 3d (support) Platoon, commanded by Lt Alford (killed on Okinawa), against the enemy right flank.

Alford's platoon began to push back the Jap right flank and we were slowly moving forward again. Then, a fresh downpour began which blotted out all hearing and most observation. This retarded our movement, and before we knew it another hour had gone by.

Now we could hear frantic yelling by the Japs. We were backing them toward the cliffs. I suppose they began to realize that they were being bottled up, because resistance in front of Alford's platoon began to give way; they were withdrawing up the trail to the northeast. Luckel's entire company began to move and succeeded in going about 200 yards without much resistance. This was to be the Jap's final stand.

Seventy-five yards ahead, there began a sort of chant or yelling which sounded subhuman, as anyone can attest who has heard the preparations for a *banzai.*

It was now after 1300. It hardly seemed possible that we had been fighting over three hours. The colonel decided that now was the time to bring up his reserve, first, to be prepared for the expected *banzai,* and second, to anchor his right flank on the cliffs for a final assault through the enemy positions.

Para. 464: Choosing the proper time at which the reserve should be used is often the commander's most difficult and most important decision. Nevertheless, at the decisive moment of action every man that can be used to advantage must participate in the battle and the reserve must be launched without hesitation. As far as practicable the reserve is sent by complete units.

The battalion reserve consisted of the machine gun platoon and the 3d Platoon, P Company, commanded by Lt McCarthy. The colonel ordered one section of the P Company machine guns attached to O Company. These were rapidly integrated in the line. Then, he ordered McCarthy's 3d Platoon, P Company, with the remaining section of machine guns attached, to tie in with O Company's right flank. There was also available a 60mm mortar platoon but this was unable to fire because of the dense jungle overhead mask.

NO SOONER had this move been completed than the hopeless *banzai* charge began. The machine guns spoke, first one, then another, and another for about 30 seconds. In those 30 seconds the backbone of Japanese resistance was broken. Immediately thereafter McCarthy moved his 3d Platoon against the remaining resistance and captured the 3-inch naval gun. The next hour consisted of mopping up, cleaning Japs out of caves, and flushing lone frightened riflemen from jungle hiding places. Half a dozen or so chose to plunge to their death from the cliffs of the harbor rather than face the raiders' guns.

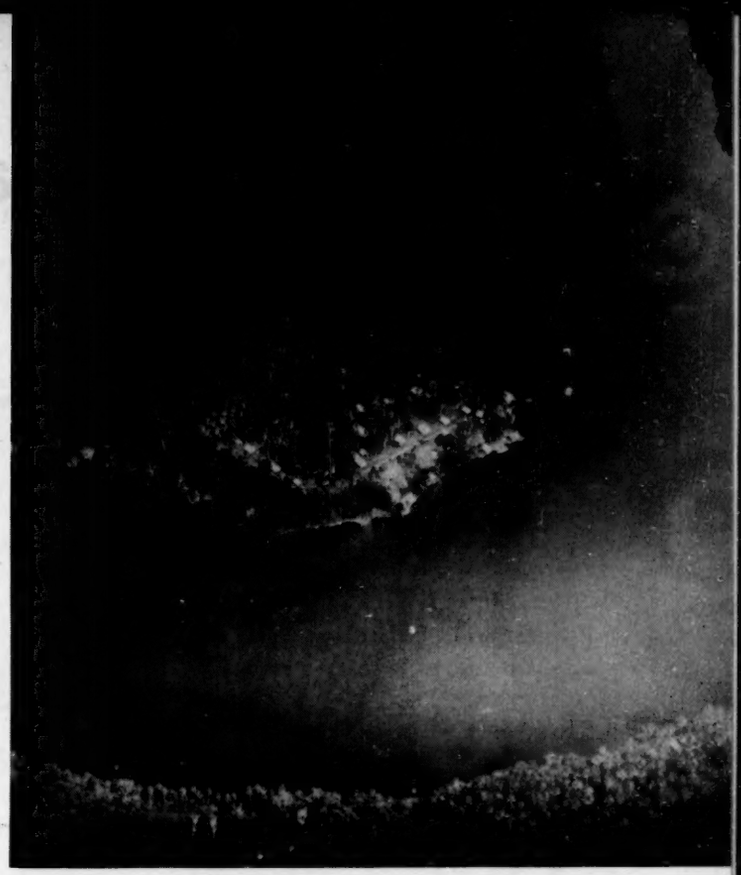
It was 1600 by the time we had organized a perimeter defense around Tetemara. Now coming into the harbor was an APC (Navy schooner) and two LCTs. They had been just outside the entrance waiting for recognition that the harbor was secure, and had seen our flag raised. They brought fresh stores, good food, and clean clothes. The APC skipper said that they wondered what the hell was going on as the place was supposed to be in friendly hands and no one had given them the word that it hadn't been taken on schedule. Fortunately the bombing and our contact thereafter had prevented the Japs from using their naval gun.

Security patrols were sent out to look for possible bypassed Japs, to count the dead, and to warn of any patrols or reinforcements coming from Munda.

Para. 241: Each commander is responsible for the security of his command. He insures that measures adopted are appropriate to the hostile threat.

Capt Walker's force in Tombi reported no casualties against 15 enemy dead. They had effected complete surprise as they emerged from the swamp, firing on the Japs while they were attempting to evacuate by barge.

From the count of enemy dead since the bginning of the operation, including those who had jumped over the cliff, and those who possibly had escaped, it was estimated that we had defeated an enemy garrison (as anticipated) of at least 100 men. This, as compared with



Aerial view of Viru harbor. Raiders marched overland to capture this port for use as PT base by the Navy.

raider casualties of eight dead and 15 wounded, spoke favorably for a maiden operation.

Automatic weapons captured were: four .25 cal. LMGs, three .31 cal. LMGs, one .31 cal. HMG, and six .51 cal. air cooled HMGs. Fortunately the .51 cal. machine guns, located along the Jap prepared defense line, were unmanned. This was obviously due to the bombing of our planes, because throughout the Tetemara Jap bivouac and defense area there were numerous bomb craters of some 40 feet across and 25 feet deep.

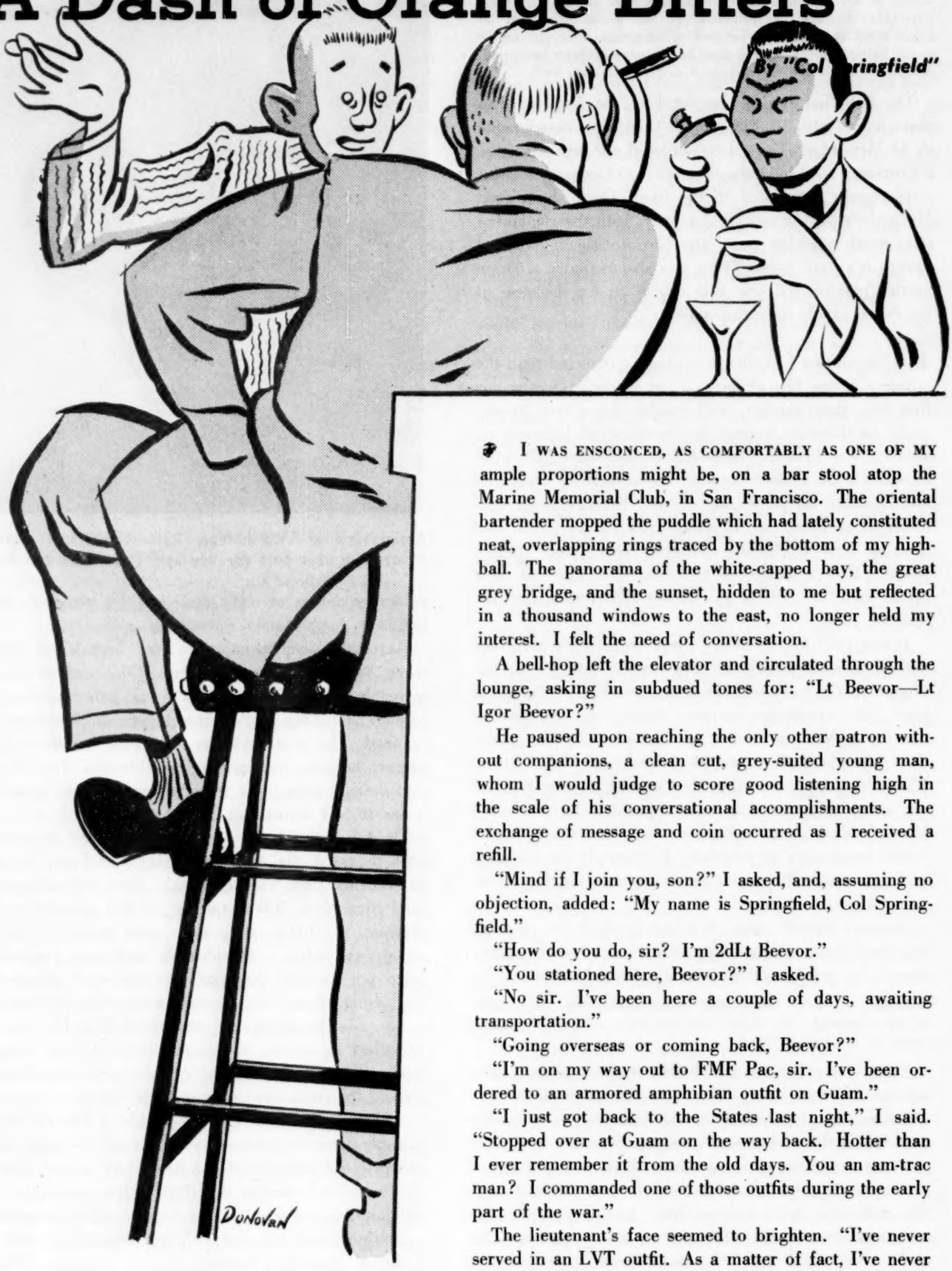
On 4 July the Army company, which had been scheduled to arrive via APD on D-Day (30 June) to assist in securing Viru, reached Tombi after proceeding overland from Segi. While standing off the entrance to Viru Harbor on D-Day, they were fired upon by the Jap naval gun. After a considerable wait, they realized we were not making the time schedule, and returned to Segi from where they proceeded overland to Tombi.

So ends the attack and seizure of Viru Harbor. We remained in defense of this area until 9 July, when we were relieved by additional Army troops. We then embarked for our home camp on Guadalcanal.

Although we have appended only a few of the applicable combat doctrines to this small operation, many others could undoubtedly be listed. As we can note the application of combat doctrines in the achievement of successful operations, so can we also select unsuccessful operations and, by analysis, note equally as well, the violation of combat doctrines. USMC

A Dash of Orange Bitters

By "Col ringfield"



I WAS ENSCONCED, AS COMFORTABLY AS ONE OF MY ample proportions might be, on a bar stool atop the Marine Memorial Club, in San Francisco. The oriental bartender mopped the puddle which had lately constituted neat, overlapping rings traced by the bottom of my highball. The panorama of the white-capped bay, the great grey bridge, and the sunset, hidden to me but reflected in a thousand windows to the east, no longer held my interest. I felt the need of conversation.

A bell-hop left the elevator and circulated through the lounge, asking in subdued tones for: "Lt Beevor—Lt Igor Beevor?"

He paused upon reaching the only other patron without companions, a clean cut, grey-suited young man, whom I would judge to score good listening high in the scale of his conversational accomplishments. The exchange of message and coin occurred as I received a refill.

"Mind if I join you, son?" I asked, and, assuming no objection, added: "My name is Springfield, Col Springfield."

"How do you do, sir? I'm 2dLt Beevor."

"You stationed here, Beevor?" I asked.

"No sir. I've been here a couple of days, awaiting transportation."

"Going overseas or coming back, Beevor?"

"I'm on my way out to FMF Pac, sir. I've been ordered to an armored amphibian outfit on Guam."

"I just got back to the States last night," I said. "Stopped over at Guam on the way back. Hotter than I ever remember it from the old days. You an am-trac man? I commanded one of those outfits during the early part of the war."

The lieutenant's face seemed to brighten. "I've never served in an LVT outfit. As a matter of fact, I've never

The salty old combat-wise colonel struck up a conversation with a lieutenant fresh out of Basic School because he wanted to tell of his experiences in the Solomons. What he got was some new ideas for the armament of the versatile LVT(A)

served in any kind of an outfit, as I just finished Basic School. They sent me a modification to my original orders while I was home on leave, Colonel, and you're the first one I've met since then who can give me the word on armored amphibians."

"Didn't they teach you anything about LVT(A)s in Basic School?" I asked.

"Oh sure. But I never thought I'd wind up in one of those outfits, and I guess I just didn't pay much attention to the lectures."

"Well, son, you came to the right source," I began. "Of course, I hate to talk about my own experiences, but I daresay it's warranted under the circumstances. I'll never forget one particular day in the Solomons—"

"Col Springfield," Beevor interrupted, "All I know about LVT(A)s is that they go in with the first infantry wave and shoot up the beach as they approach. I guess that's to neutralize the beach defenses and knock out any guns that threaten the landing craft. Is that right?"

"Well, that sums up their primary mission just about as well as I could do it myself. As I started to say—"

"PRIMARY MISSION, Col Springfield? Do you mean they have some secondary missions, too?"

"Certainly, lad! What did you suppose they'd do after the initial waves landed and started to move inland? Without some secondary mission they'd just sit around idle on the beach. Meantime, those foot troops would have no artillery ashore to support 'em. Naturally, we decided to use these idle LVT(A)s as direct support artillery, to fill the gap until the regular artillery landed." Turning to the bartender, I ordered another and asked Beevor what his would be.

"Martini, please. Three to one, orange bitters, and just a touch of olive juice," he instructed the bartender, and continued: "Colonel, what do the armored am-tracs do after the direct support artillery comes ashore?"

"They're usually assigned a mission of reinforcing the regular direct support artillery, which has taken over from them."

Beevor tilted his dry glass, dropping the olive into his mouth. I seized my opportunity. "Reminds me of one day in the Solomons—"

"What sort of armament does the LVT(A) carry, Colonel?" asked the lieutenant, reverting to mastication of his olive.

"They mount a 75mm howitzer in a light turret, and have a gyro-stabilizer which they use while firing from the water," I answered, in a resigned tone.

"How come they use a 75 'how,' sir? I thought that weapon was just about obsolete."

"Thats a good question, Lieutenant. I suppose the answer is that when they built the first LVT(A)s, the 75 pack howitzer was the standard direct support weapon in the FMF. As a matter of fact, the tubes used in the pack howitzer and the LVT(A) are essentially identical. And they use the same ammunition."

"If I understand you correctly, Colonel, they picked a weapon to fit the secondary mission, rather than the primary mission of waterborne assault fire. Is that right, sir?"

"Well, I suppose you would have to draw that conclusion," I reflected, admitting: "I've never thought about it in just that light, although it sounds a little silly when you consider it."

"Another thing, Col Springfield—you said the LVT(A)s reinforce direct support artillery after it gets in. But I thought 105 howitzers were used for direct support missions now."

"So they are, but I don't get what you're driving at."

"As I see it, you'd be reinforcing 105s with 75s. If the 105s couldn't handle the target, I don't see how those 75s could do much about helping them. If you're going to reinforce 'em, it would seem more logical to do it with heavier weapons, instead of lighter ones."

"You've got some food for thought there, Beevor," I mused. "I've never seen any damage assessment reports from fire missions in which LVT(A)s furnished reinforcement to 105s, but offhand, I wouldn't say the results would be anything to write home about."

"COLONEL, do you think we'd be wrong, then, in concluding that the armored amphibian's 75 howitzers is not too well adapted to executing its secondary mission after direct support 105s come ashore?"

"I think you'd be on fairly safe ground in that conclusion, Beevor, especially if you compare range capabilities of both weapons and recognize the fact that greater inland mobility of the 105 will tend to reduce the relative range of the 75 for reinforcement purposes."

"Let's go back to the primary mission, Col Springfield, with the LVT(A) firing from the water. It seems to me that those gun emplacements on the beach are pretty much like the targets usually assigned to assault field artillery. They use a self-propelled 155 gun to knock out such pill-boxes and gun positions when they run into 'em inland."

"Come now, Beevor; you're not going to suggest that

they mount a 155 rifle in the LVT(A), are you?"

"Oh no, sir. I was just thinking that the 75 doesn't seem to have the punch necessary to handle a well-constructed fortification for an anti-boat gun."

"Beevor, you've already made a fairly air-tight case against the 75 in its secondary mission. If I follow you correctly, you seem on the verge of claiming it's not so hot in its primary mission, either."

"That's roughly what I had in mind, sir. I'm not well qualified to judge, but I just don't feel the 75 howitzer belongs in the category of assault weapons, nor can it do much good in reinforcing the heavier 105 howitzer."

He paused, and then continued: "There's another type of emergency mission we haven't run into in the past, but which the LVT(A)s might well encounter in the future."

"What's that?" I asked.

"Suppose a mechanized counterattack hit a flank just as the infantry got a foot-hold on the beach. That 75 wouldn't be much good in a situation like that, where you'd probably want a weapon with higher velocity."

"Just for the sake of discussion, lad, suppose you had a free hand in mounting a different weapon on the LVT(A). What gun would you suggest?"

"If I wanted to put a permanent crimp in those beach guns, I think I'd mount a 90mm gun. If I knew more about that new 3 inch-50 automatic gun of the Navy's, I might choose that over the 90. I'd think seriously about pulling that twin 40mm mount off the M-19 motor carriage developed by the Army. Before I made up my mind about any of 'em, Colonel, I'd have to figure out what to use the weapon for after the infantry hit the beach."

"Just what I was going to suggest," I put in.

"If we still want to use 'em as direct support artillery initially, and as reinforcing artillery after the normal field artillery gets ashore, then I'd say we should scrap the 75s and replace 'em with 105s. They'd be far better for both of these field artillery missions."

"Beevor, I agree that those weapons would be better suited to certain missions than the 75 howitzer," I interposed. "But I don't think you could expect the LVT(A) to carry any of those you mentioned, with the possible exception of the twin 40mm mount."

"Col Springfield, no offense, sir, but if the tankers took that same attitude they'd still be running around in their old M-5s with 37mm pop-guns. When they felt the need of a new gun, they designed a new turret and chassis around it. The National Security Act says the Marine Corps is supposed to develop new material for amphibious operations, and it seems to me this would be a good place to put it into effect. The technical problems could certainly be licked, Colonel. A country able to develop the A-bomb should be able to produce an amphibious vehicle capable of carrying a gun bigger than the 75 howitzer."

At this point I found myself wishing that the young man had received orders to take command of a laundry platoon. After the briefest pause, he began again:

"Colonel, a while ago you said the LVT(A)s, in their second mission, fill the gap in direct support of infantry until field artillery gets ashore. One thing I'd like to know is, what fills the gap in air defense of the beach until antiaircraft artillery gets ashore?"

"Well, once in the Solomons we shot down a Zero with our 50 calibers."

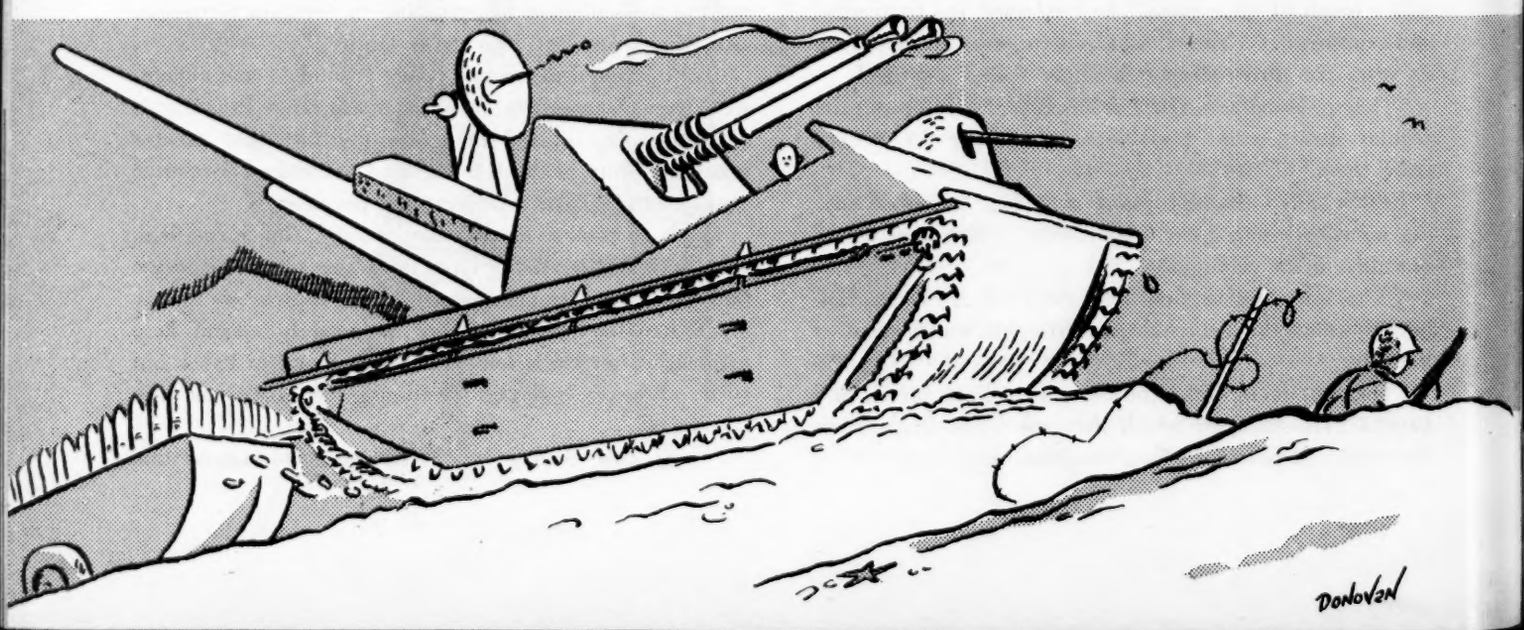
Beevor remained unimpressed, for he asked: "Why can't the LVT(A)s be used to fill this gap, too?"

"Just how could they be expected to do that?"

"Well, why not mount a dual-purpose gun on 'em—one gun that could be used for assault fire against the beach, and then be used to set up an early AA defense until the regular AAA comes in?"

I could see he was getting wound up again, so I decided to stand on the neutral ground of silence.

"If you used a 90mm you'd run up against a problem of bulky equipment in getting a radar and director ashore at that early stage of the game. But when you get right down to it, I'm not so sure you'd need a 90 on the beach initially. There won't be too many targets on or near the beach suitable for a high-level bomber to attack. They'd probably go after the transport area, which would



be out of range of shore-based 90s."

"That's exactly what I observed in the Solomons," I broke in.

Beevor went on: "I should think the greatest threat to the troops ashore would be from low-flying attack planes. What we'd need there would be an automatic weapon, one with more flexibility than the 90mm, and one with a higher rate of fire. That seems to narrow the field to either the Navy 3 inch-50 automatic, or the twin 40mm mount."

"They wouldn't be bad in executing the LVT(A)s primary mission either," I said.

"That's true," Beevor answered. "How do you think they'd compare with the 75 howitzer in early anti-mechanized defense of the beachhead?"

"That 3 inch shell should be just about the same size as the 75mm," I answered, "But I would estimate it to have at least twice the muzzle velocity of the 75."

"And not only that, sir, but you'd have a much higher rate of fire with the automatic 3 inch. I guess it would be a lot better in every way than the 75 for antitank fires. What do you think about the twin 40s for anti-mechanized defense?"

"Well, the 40mm projectile doesn't stack up too well against the 75 shell. That'd be two pounds against 15. But there again you'd have to consider muzzle velocity and rate of fire. If I recall the cyclic rate of a single Bofors correctly, you should be able to get almost 240 rounds per minute out of a twin mount," I contributed.

"TANK OR NO TANK, I think my morale would drop considerably if I was on the receiving end of that delivery. I imagine radio antennas, periscopes and tracks would take quite a beating from the 40s. Another thing, those tanks would probably have some infantry with 'em in their attack. If they were on foot or riding the tanks, the 40s would take care of them very easily. Even if they accompanied the tanks in armored personnel carriers, I think the 40s could take a heavy toll when they got in close."

"Before we go off the deep end in your reorganization, Beevor, where are we going to get all the ammo to feed these automatic guns of yours? You know the LVT(A) will only carry a limited amount."

"They should be able to supply 'em the same as they do field artillery during the initial stages. By assigning extra LVTs, or DUKWs, to the armored amphibians, they should be able to keep the automatic guns supplied just as easily as they do the 75s now," Beevor said.

I decided it was time to show this young officer I wasn't asleep on my feet, or more precisely, on that portion of my anatomy closest to the bar stool. I declared: "Beevor, suppose the Marine Corps did adopt your sweeping changes, and they mounted these automatic AA weapons in LVT(A)s. The beach defenses would probably stay neutralized after pre-landing naval gunfire and air strikes had shifted to inland targets, due to these rapid-fire weapons accompanying the assault waves. I'll also grant you that assault infantry would enjoy some AA protection from these dual-purpose guns. But what would the infantry do for early artillery support if there was nothing on the beach but these flat trajectory weapons? You would fill the gap in shore-based AA protection, but you'd still leave the gap in initial artillery support that existed before the LVT(A) was conceived." There I had him.

"But Col Springfield, I didn't say anything about shifting all the LVT(A)s over to AA weapons," Beevor retorted. "I've just been picturing an ideal armored amphibian outfit. It would consist of amphibious vehicles which might have to be heavier and more durable than those we have today. Each would mount a weapon suitable for the primary waterborne assault firing mission. The weapons should also be capable of furnishing initial artillery support for assault forces, as well as providing initial AA defense for those assault forces against low-flying attack aircraft."

Beevor paused momentarily, then continued: "That 75 howitzer is not the weapon for any of these jobs. I think the 105 is the only one that would be suitable for the secondary field artillery missions. And we've already narrowed the secondary AA mission down to the Navy 3 inch automatic and the twin 40mms. By the way, Colonel, what's the present war-time organization of the armored amphibian battalion?"

"I believe the battalion includes a total of four LVT(A) companies," I answered.

"In that case I guess they should have two of those companies armed with 105 howitzers, one company armed with 3 inch automatics, and the last with twin 40mm. That should be a pretty good organization for amphibious operations, if they assigned one armored amphibian battalion to each division in the assault. Each of the two 105 companies could be assigned in direct support of an assault infantry regiment after they got on the beach. The 3 inch and 40mm companies could furnish initial AA defense for the division beaches. How does that sound to you, Col Springfield?"

"Well, Beevor, that could be a better solution than what we have today," I was forced to admit.

"Colonel, I have to go now. It's certainly been a pleasure talking to you. And thank you for clearing up all those things I've been wondering about, sir. Good bye."

"So long, son."

As the elevator doors closed behind the lieutenant I turned to the bartender. "Give me a martini, three to one, orange bitters, and just a touch of olive juice. And when you get back I'm going to tell you about an experience I had in the Solomons." USMC

What About the NROTC?

Is the Navy's college training program worthwhile from a Marine Corps viewpoint? The Platoon Leaders Class is perhaps better both for type of training and cost

By Capt Raymond L. Valente

THERE HAS BEEN CONSIDERABLE DISCUSSION RE-cently in the MARINE CORPS GAZETTE concerning the relative merits of the Basic School and the ability of this school to indoctrinate properly the newly commissioned officer into the ways of the corps. However, the initial article written by 2dLt William A. Reavis entitled *Why Not a Marine Corps Academy*, and the subsequent rebuttle penned by Col Edward W. Snedeker that appeared in the January issue of the MARINE CORPS GAZETTE, are both concerned with the educational training program of the commissioned officer. In each instance the assumption is made that the young officer, physically fit, of excellent character, of high morale, and imbued with the determination to succeed in the Corps, is eagerly waiting for the Marine Corps Schools to complete the metamorphosis that will change him into the efficiently trained officer.

This article does not propose to enter the controversy which resolved around the ability of the Basic School to perform its mission; namely, "to train newly commissioned lieutenants in the duties and responsibilities of Marine officers, ashore and afloat, with emphasis on the duties of an infantry platoon commander." To all intents and purposes this question has been competently settled by Col Snedeker's *The Basic School.* It would appear then that perhaps the basic problem is the proper selection of the man for the commission and not the physical organization to train the commissioned man.

The roads leading to a commission in the Marine Corps are many and varied. The newly commissioned officer may be a Naval Academy graduate; a meritorious non-commissioned officer; a graduate of an accredited college or university or graduate from a Naval Reserve Officers' Training Corps Unit, to mention a few. The purpose of officer procurement is to screen the many individuals who apply so that those men who are offered regular commissions are those whose abilities, aptitudes, and capabilities are reasonably equal. Unfortunately, however, some of the sources mentioned above do not offer the opportunity of selection, but merely one of acceptance.

How important is this process of selection and what bearing does it have on the service educational system? A recent graduate of a NROTC unit who underwent basic training at Quantico stated that the slogan of some of the officers undergoing instruction was paraphrased from the old corps saying to "it all counts on two"—two years normally being the minimum time before application for resignation will receive consideration. While it is granted that this attitude has not been adopted in mass, the very fact that such a reaction is present is cause for constructive thought.

IT IS APPARENT that a tremendous change in morale has taken place from the pre-war and wartime training program that would allow even such a partial condition to exist. There must be reasons for such an attitude. Among them could be the lack of incentive that served to spur on the wartime trainee. It is possible that some of the newly commissioned officers decided to take advantage of the active duty training with one eye on the current world situation, and the other eye pointed toward a good billet on the outside. Others may have found themselves obligated to serve two years of active duty, and chose the Marine Corps as the lesser of two evils, the Navy being the other. It is possible that certain non-commissioned officers were misinformed or else had an exalted view of the life of an embryo officer. Whatever the cause of dissatisfaction may be, it is evident that its very presence creates a tremendous obstacle for the service training program to overcome.

Since a review of all the methods of obtaining a commission is beyond the scope of this article, it is proposed to show how one of the sources *may* be contributing to the production of the non-adjusted officer. The source in question is the Naval Reserve Officers' Training Corps. A clarification of the apparent misnomer in the title of

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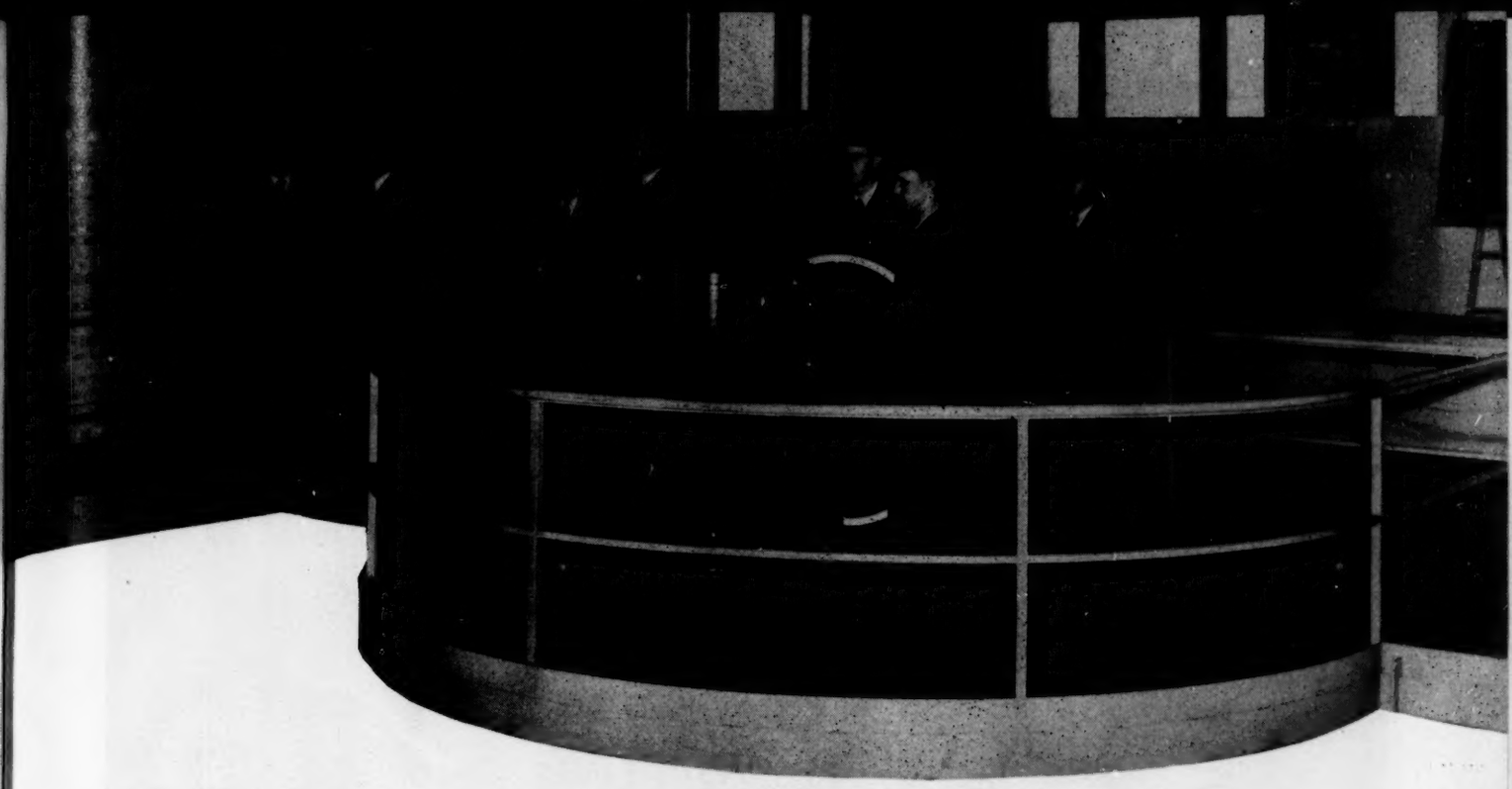
The author, Capt Raymond L. Valente, is the Marine officer on the staff of the NROTC unit at the University of Michigan.



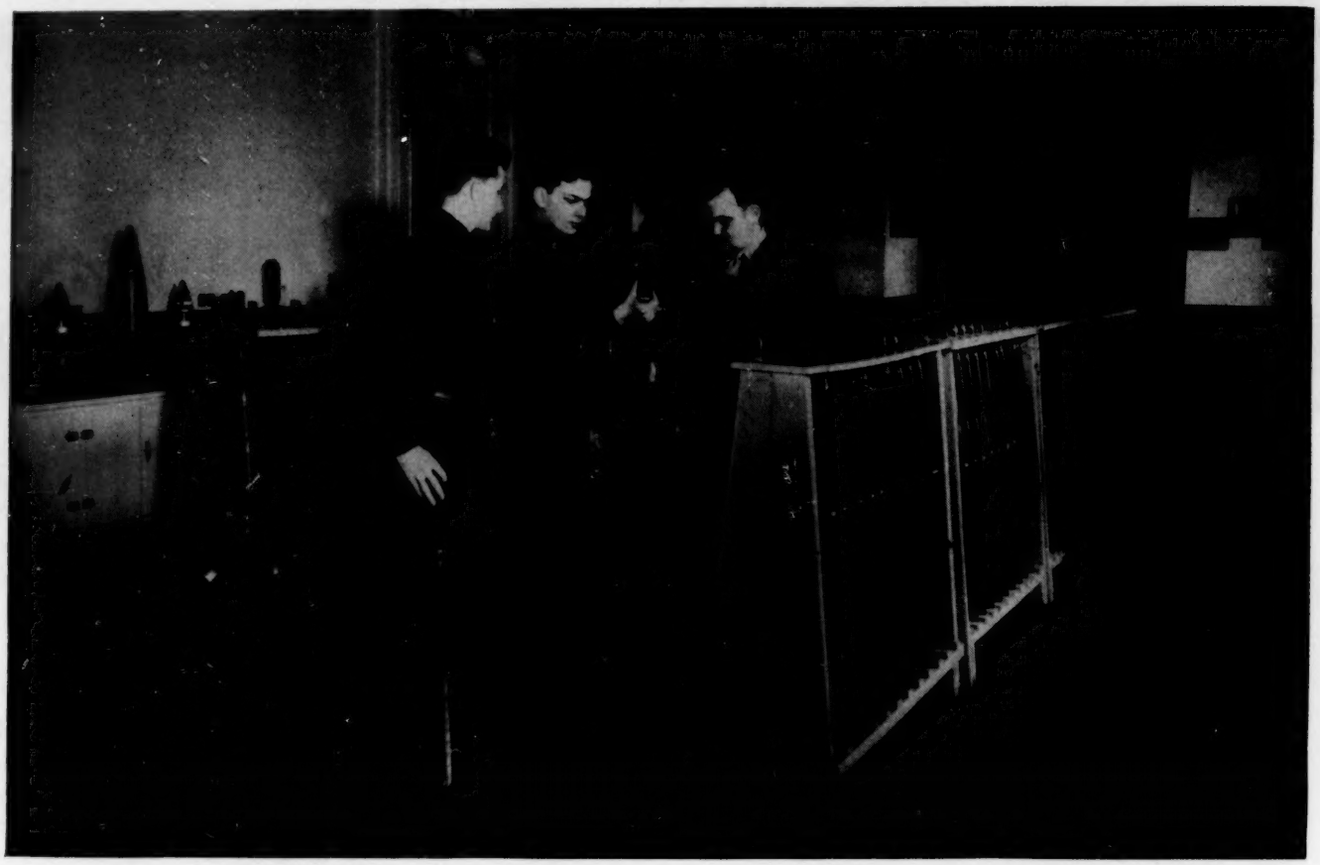
this program is in order. There are two types of students enrolled in the NROTC units, these being the "regular" and the "contract" students. The contract student is not obligated to go on active duty. He receives a reserve commission upon graduation and his only remuneration from the government consists of subsistence payments (currently $27 monthly) during his junior and senior year. However, it is possible for a contract student to receive a regular commission upon graduation *providing* his application is approved and the quota of regular officers from all sources, as determined by budgetary limitations, has not been filled. The regular student receives full tuition, non-refundable fees, all his text books and equipment, midshipman's uniforms, and also receives pay at the rate of $50 per month for the four scholastic years. During his summer periods he is ordered to various cruise ships or training stations and receives active duty [illegible] for this time. He receives a regular commission in the U. S. Marine Corps upon graduation. A percentage of students are [illegible]. As the Navy is concerned, this program is designed to provide the Navy Department its primary source of regular officers, the Naval Academy, and to a lesser degree [illegible] additional regular officers to the Marine Corps.

THE MISSION of the NROTC, as stated in the [illegible] regulations,[1] "is to provide by a permanent system of training and instruction in essential naval subjects at civil educational institutions a source from which qualified officers may be obtained for the *Navy* and the *Marine Corps*, and the Naval Reserve and the Marine Corps Reserve."

[1] Regulations for the [illegible] and [illegible] the Naval Reserve Officers [illegible]—N[illegible]

Currently there are 52 Marine Corps officers stationed throughout the country at NROTC units. These officers, ranging in rank from first lieutenant to major are serving on the staffs of these units as the Marine Corps Instructor in Naval Science. Serving along with the instructors are non-commissioned officers of the first three pay grades whose duty is that of assistant instructor. The program at these units is primarily Navy. The high school student is induced to participate in a nation-wide preliminary examination to win the Navy scholarship. Although nation-wide in scope, the individual competes only against other applicants from his own state. Each state has a different "cutting score" or minimum passing level, dependent on the general performance of the students participating. If the applicant passes the written examination he must be judged physically fit, as determined by the standard Navy physical examination. His next [illegible] to pass is a personal interview with a representative [illegible] Officer Procurement and a [illegible] from one of the NROTC [illegible] process eventually [illegible] to a number equal to four [illegible] quota for that state. The final [illegible] Selection Committee which [illegible] the rank of captain, if practicable, [illegible] field of education; and an outstanding professional or business man. This committee judges the applicants [illegible] on their record and does [illegible] personal [illegible]

[illegible] these hurdles he [illegible] colleges or universities [illegible] accepted by the school [illegible] in the Naval Science courses as an adjunct to



The midshipman's instruction during the first two years is predominantly naval in nature. Not until the student is a second-semester junior is he allowed to transfer to Marine Corps classes.

his selected civilian educational program. It is the rule, rather than the exception, that the midshipman's first awareness of the Marine Corps is when he sees the Marine instructor. More often than not he wonders what the instructor is doing there.

The midshipman's instruction during the first two years is predominately naval in nature. His summer cruises are aboard ships or at a naval station. When the student is a second-semester junior he is allowed to elect transfer to the Marine Corps courses. By this time the student has completed the basic naval science courses through navigation.

It is normally in the junior year that the midshipman decides what type of commission he wants to receive. The primary Navy commission offered, of course, is that of line officer, but other special commissions are offered in Supply Corps, Naval Aviation, Civil Engineering, and the Marine Corps. While it is granted that quotas are established yearly for certain classes of commissions, the fact remains that the option of requesting a specific category is not regulated. It necessarily follows that certain fields will be over-subscribed by the aspiring officers which will in turn enforce selection. Those rejected applicants must then make a second choice. It might be well here to cite a concrete example of the choices of a junior class from one midwestern university. Out of a total of 45 midshipmen in the junior class, 17 made application to the Supply Corps, three made application for Civil Engineering Corps and five elected to receive Marine Corps training. Of the 20 remaining midshipmen in this class it is not known how many will eventually apply for Naval Aviation.

The number of applicants for commission in the Marine Corps is regulated to 16⅔ percent of the expected graduating class in a particular unit, or 16⅔ percent of the total number expecting to be graduated throughout the country in all units. The latter provision allows an individual unit to have more Marine candidates than the prescribed percentage. The midshipman who transfers to Marine Science enrolls in three successive courses taught by the Marine instructor. The first two courses are of an excellent background nature, encompassing the principles of war, specific battles illustrating those principles, and the origins of American military policy. The final course is based on selected amphibious operations, with the historical as well as the tactical approach carefully blended to provide the student with the overall concept of this most important phase of Ma-

There are 52 Marine officers serving as instructors in naval science at NROTC units throughout the country. Serving with them are non-commissioned officers of the first three pay grades.

rine training. However, the midshipman's first actual contact with the Marine Corps occurs during the summer period between his junior and senior year. It is expected that the summer camp will prove to be of inestimable value as his familiarity with the fundamentals of basic training is limited during his school program.

Although it is not possible at this time to estimate closely the number of lieutenants who will enter the Corps from this program it could be as high as 340; it might be as low as 10. The calculation is based on the present junior class which is the most advanced group under the current scholarship program.

THE DIFFERENCE between this system from the pre-war NROTC program and the past and present Platoon Leaders Program is the single but all important fact that previously the lieutenant *voluntarily* entered the Corps. The present NROTC graduate received his four year scholarship by *obligating* himself to serve two years of active duty. Some doubt exists as to whether any but a small minority would have chosen the Marine Corps or the Navy as careers, even temporarily, were it not for the educational inducement. This program then resolves into a two-year officer draft which is against one of the oldest principles of the Corps. During that time those officers who are not interested in the Marine Corps can cause even the best training program to fall short of maximum efficiency.

How large a percentage of these officers will remain on active duty after their two year tour has ended cannot be answered now or even estimated. Unless an adequate number of officers from these units elect to make the service their careers, this program will find itself eventually providing the Navy and Marine Corps with Reserve officers. Insofar as the Marine Corps is concerned, it would appear that an adequate number of Reserve officers is provided yearly through the Platoon Leaders Class. This training program, which is strictly Marine Corps in nature, also provides for the regular appointment of outstanding men to commissioned rank in the corps. Newly commissioned lieutenants from both programs are usually ordered to the Basic School for further training. A comparison of the two programs with regard to the regular officer seems to favor the Platoon Leaders Class both in cost of training and type of training, and, in addition, provides a better system for determining an applicant's desirability for the Marine Corps.

USMC

Reverse Slope Defense

By LtCol Rathvon M. Tompkins

FOR THE BATTALION OF COLDSTREAM GUARDS IT WAS the first major action since they had helped hold the Germans off at Dunkirk; for the battalion from the American combat team it was the first action and for many their last. I don't know if their graves are still there along the road to Teboura, probably they have been gathered into the cemetery that we established further north. Maybe they're bringing the bodies home in accordance with the rather weird pagan custom that we have; if so, the local papers will carry a short paragraph to the effect that "the body of Sgt so-and-so has been returned for burial in the national cemetery. Sgt so-and-so was killed in North Africa in 1942." But the papers won't know, and maybe even his parents or wife won't know, that the Sergeant was killed when his outfit tried to take a hill only 800 feet high which the Arabs call Djebel el Ahmera, but which was known to the British and to our own people as "Longstop Hill." There is nothing—or rather, was nothing—very momentous about the place. It was simply a bump on the earth's surface, a critical terrain feature, if you will, in a regimental zone of action that had to be seized as part of the big drive down to Tunis.

Somebody up at Corps level, thoughtfully studying his map, had drawn a careful goose-egg around Longstop Hill, added a broad arrow pointing into the goose-egg, and that was that. The wheels whirred and the word came through channels that —Battalion of the Coldstream Guards would secure Longstop Hill with no shilly-shally, for they were needed elsewhere shortly thereafter.

The plan was quite simple. The battalion of the Coldstreams would seize Longstop Hill during the night of 22-23 December and, when they had the situation tidied up, they would be relieved before dawn by a battalion of an American combat team. The Coldstreams would then march 12 miles to the rear to prepare themselves to take part in another party that was to be pulled off after Longstop Hill was secured.

LtCol Rathvon M. Tompkins, a prolific contributor, has been Chief of the Infantry Section, Amphibious Warfare School—Junior Course, since his return from School of Combined Operations in England.

As far as could be seen and as far as the French maps were concerned, Longstop was a regular, isolated feature about two miles in length, rising, as has been noted to a height of 800 feet, being separated from the high ground to the west by a low *col** and from the high ground to the north by what looked like a basin (see Sketch #1). But what was not known was that Longstop Hill, was in fact, a double feature; the part which the maps showed and which could be seen from our positions being know as Djebel el Ahmera; but at the northeast end of Longstop Hill there was another distinct and separate feature called Djebel el Rhar—the maps didn't show it and it couldn't be observed from the ground.

To begin with all went well. After a 20 minute artillery preparation the Coldstream attack went in; the night was dark with much cloud and little moon. All companies got on to their assigned objectives without too much trouble, the Americans relieved the British in position, and it was all very neat because we had secured the whole of the vital high ground, or so it was thought. The Coldstreams started back towards Medjez as scheduled.

German counterattacks started before dawn and the fighting was sullen and bitter. Pouring rain added to the misery of trying to dig in on rocky ground under heavy mortar and machine gun fire. By Christmas Eve the Coldstreams were clawing their way back up the forward slopes of Longstop Hill again to help hold on to the vital ground.

With great gallantry the combined forces fought their way back up to the top of the ridge line, to the original position, to find that it was not in fact the commanding ground. As a matter of record there were four ridge lines which the Germans were occupying. The first three were defended rather lightly and the fourth, which made up the El Rhar feature, at the northeast end, was the main battle position. There were enough automatic weapons on the forward slopes of the ridges to make our people fight their way up. As soon as the top of the first ridge had been taken, all the guns on the second ridge were laid and fired on the crest line of the first ridge. This meant that the attackers had to fight their way down the slope

*Gully

The first of the assault formations gained the crest of the third ridge and there, staring at them across the gully, was the Djebel El Rhar feature. The Germans had the bulk of their forces on the reverse slope of this high ground

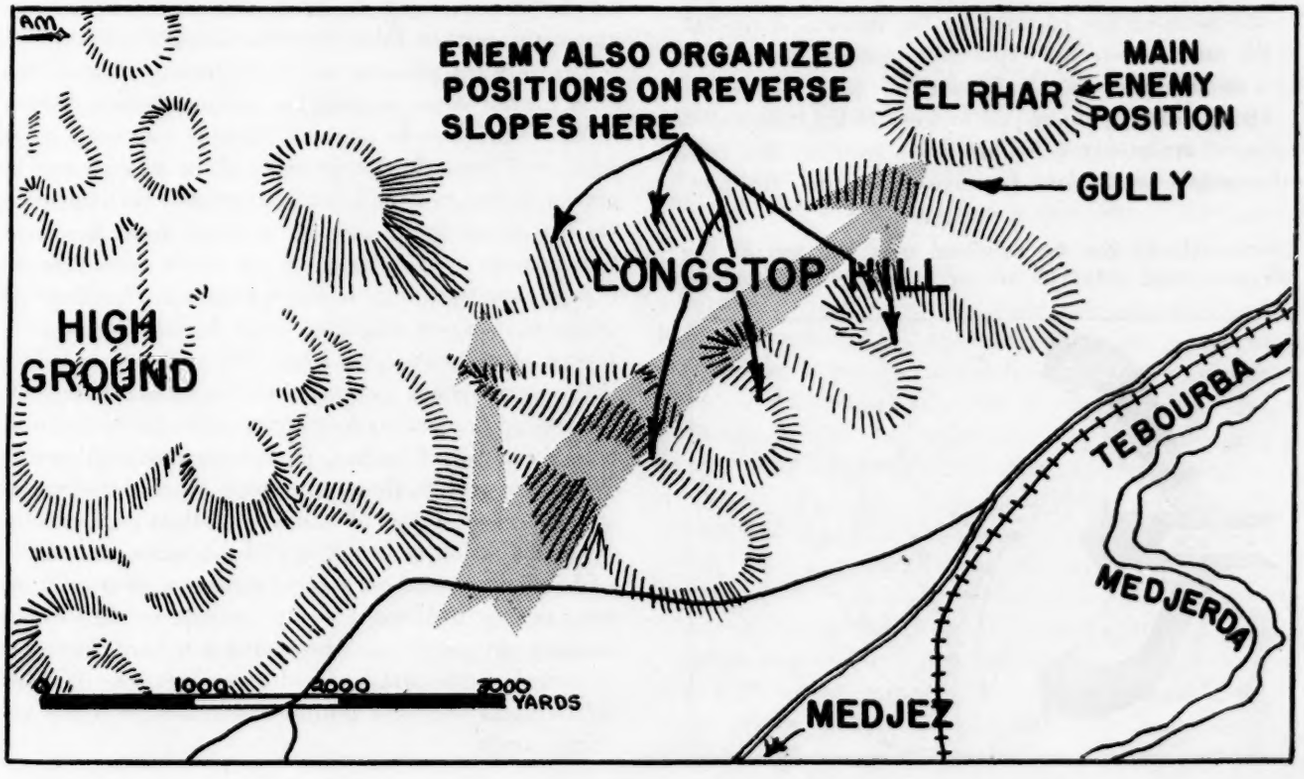
of the first ridge to get to the forward slope of the second ridge, and so on. In the failing light on Christmas Eve the first of the assault formations gained the crest of the third ridge and there, staring at them across the deep gully, was the Djebel el Rhar feature. Until then no one had even suspected its presence. The Germans had the bulk of their force on the reverse slope of this feature, where the machine guns were sited for grazing fire toward the crest. Again as the attackers came over the crest they came under the grazing fire of these guns. They were savagely counterattacked by the German infantry occupying positions on the slope. The attack failed utterly. Losses were very heavy—about 300 casualties for the American battalion and 200 for the Coldstreams. Eventually a fresh infantry brigade was brought in and managed to secure Longstop Hill. But by then the great drive to Tunis was booming along and the enemy was feeling the pressure.

There has been a lot of water under the bridge since Christmas of 1942. The Germans showed in both North Africa and Italy that they were exceedingly cunning in utilizing reverse slope defense. Our people learned fast, though in almost every case they learned the hard way by getting hurt first. Yet there's nothing mysterious about this type of defense. It's all in the book (as it always is), but somehow things get overlooked in the terrible urgency of wartime training. The old FSR (defense) (paragraph 606) said "Consideration of concealment may, however, make it desirable to select a reverse slope. Such location is practicable when possession of the crest to the front is not essential to the observation of artillery fire."

Perhaps we're losing sight of some of the expensive tactical lessons of the last war—and perhaps not; still the fact remains that the subject of reverse slope defense remains virtually neglected in our service schools and almost completely overlooked in field training exercises.

Under certain conditions, the location of the MLR on the forward slope is more costly to the defender than to the attacker. This is particularly true if the attacker has a preponderance of artillery or direct fire support weapons, such as tanks and assault guns.

There were four ridge lines which the Germans were occupying. The first three were lightly defended and the fourth, which made up the El Rhar feature at the northeast end, was main battle position.



In the past we have become accustomed to having an almost overwhelming superiority in supporting weapons together with a lavish scale of ammunition expenditure for those weapons. This happy condition may not always be true and next time out the shoe might conceivably be on the other foot. Even so, the alert battalion or company commander can often successfully defend his hill if he adopts a reverse slope type of defense.

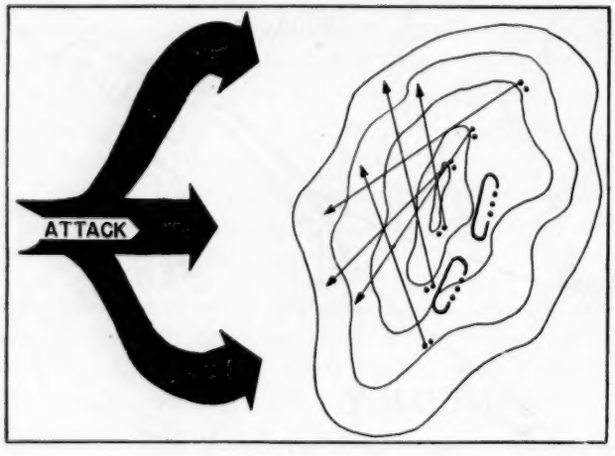
Now if we were setting down a set of categorical "rules" (which we aren't), we might say that reverse slope defense *must* be relied on (a) when control of the forward slope has been lost or has not yet been gained and (b) when lack of cover and concealment permits enemy shell fire, especially from direct fire weapons, to make the forward slope untenable. In addition, reverse slope defenses can frequently be usefully employed (a) when surprise is desired; (b) when possession of the crest to the front is not absolutely essential to artillery observation; (c) when better fields of fire are afforded on the reverse slope than on the forward slope; and (d) when the general scheme of defense would be distorted by use of a forward slope excessively far to the front. These points are all covered in essence in the various field manuals and there is nothing original about them.

However, the details of organizing a position on the reverse slope, and the reasons for such details, are not always to be found in the manual. The following suggestions are offered as an outline only, with full realization that each situation will demand its own application.

When it is desired to make as much use as possible of the fields of fire afforded by the forward slope, but at the same time reduce exposure to observed enemy fire to a minimum, we might organize our hill as follows:

Firing positions on or just forward of the topographical crest are prepared for automatic weapons and such riflemen as are required for their protection. However, the personnel to man these positions are kept, at least for the most part, on the reverse slope in suitably constructed dugouts or fox-holes provided with overhead cover to protect against air bursts. Combat groups, usually of fire team strength are outposted, if practicable, on the forward military crest with the object of slowing the attackers and affording time for the crest positions to be manned. The crest position is manned in force only at night or to beat off an attack. The majority of the riflemen not required to man the positions at the crest are kept in sheltered positions on the reverse slope and are employed in counterattacks either against the crest or around the flanks of the hill. To support such counterattacks, artillery and mortar concentrations are placed on the breached positions of the crest position.

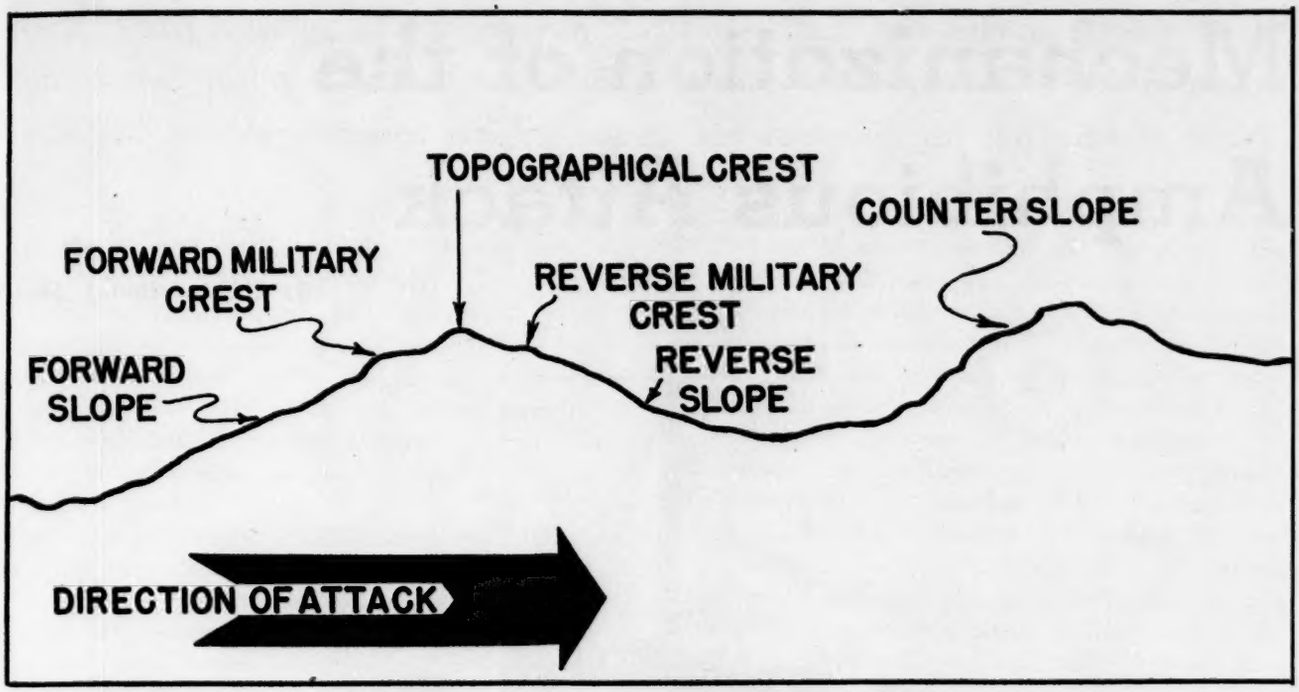
Counterattacks can be delivered over the top of the hill or around sides of hill in a double envelopment.



WHEN THE CREST is not suitable as a firing position the MLR may be located on the reverse slope with local security being provided by combat groups on the crest or on the forward slope. These combat groups should be provided by the support platoons. It may be found expedient to provide the combat groups with a high percentage of automatic weapons (an additional BAR or even an LMG); their mission is to assess the maximum damage and delay on the advancing enemy, but they should avoid becoming too closely engaged. At the last possible moment the combat groups should fall back to the main battle position (on the reverse slope, remember) or go to ground in prepared positions, designed to augment the defensive plan. The MLR itself should be so located as to permit firing on the attackers as they cross the skyline; the crest should be covered by FPLs from automatic weapons firing from the flanks.

The forward platoons must not be too close to the crest lest the enemy overrun the positions before effective defensive fires can be laid on. There is manifestly much profit and future for the defender if the attacker can be pinned to the crest and thus prevented from increasing his fire power by moving his weapons down the slope. Consequently, long fields of fire are of less concern to the defense than the ability to bring devastating fire from all available weapons onto the crest itself. As usual in reverse slope defense, all hands are well dug in and a large counterattack force is held in hand. Immediate determined counterattack to restore the battle position, once it has been breached, is an important requirement. When time permits, the counterattack should be rehearsed in sufficient detail that all hands know their parts exactly.

(In the action at Longstop Hill the survivors testified to the efficiency of those savage, quick counterattacks. As soon as they had won a costly foothold in the German position our people soon learned that a hard-driven coordinated counterattack would come smashing in—and the Germans had their position back and the whole job started again.)



Diagramatic sketch showing proper designation of crests and slopes with reference to direction of the attack. In a changing situation a reverse or counter slope may become a forward slope.

If both the forward and reverse slopes are unsuitable as locations for the battle position, the hill may still be denied to the enemy (or made excessively costly to him) by using reverse slope as a field of fire for positions located on other hills. For this purpose artillery, mortar, and long-range machine gun fires are laid down on the reverse slope, the crest, and, if possible, on the forward slope. The use of flanking hills for gun positions will frequently afford grazing fire which will rake otherwise protected areas just over the crest.

THE THREE GENERAL TYPES of defense outlined above will, of course, require innumerable modifications to suit local conditions and can frequently be employed in combinations with one another or with a defense based originally on the forward slope. Thus the MLR may be located on the forward slope and a reserve line prepared on the reverse slope; or, the main battle position may be located on the reverse slope and be supported by fires from other hills to the rear or to the flanks; or, troops on the flanks of the reverse slope may be used to counterattack around the flanks of the hill while fires from other hills are used to pin down attackers who have reached the reverse slope.

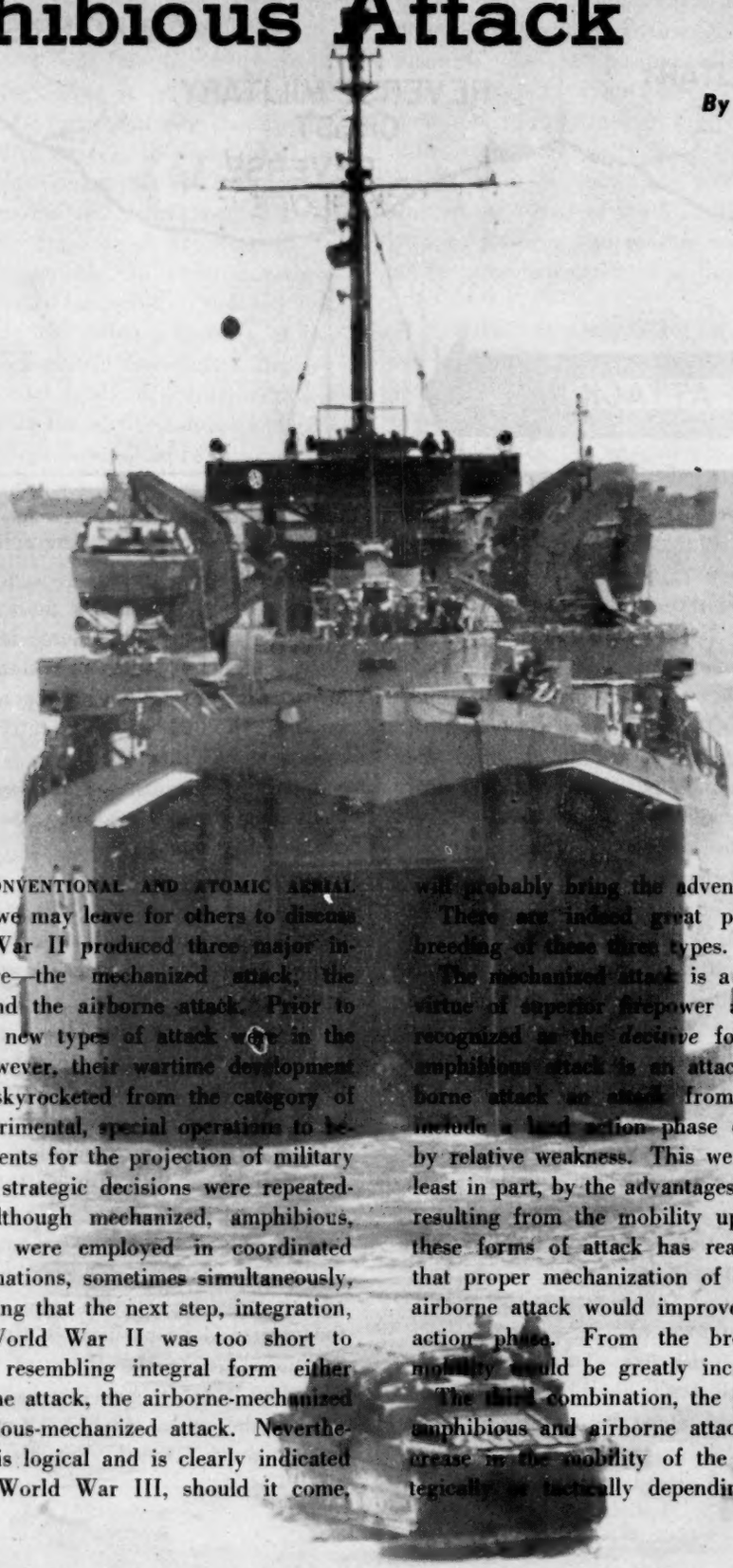
Again a combination of forward-reverse slope defense may be used depending on the time of day; i.e., defend the forward slope of a hill during the hours of darkness and defend only the reverse slope during the day. The procedure in this case follows the regular pattern. A few automatic weapons are placed on the forward slope to make the attackers fight his way to the top. A large portion of the defending force is dug in on the reverse slope of the hill, with the automatic weapons sited to fire on the crest as the attacker exposes himself on the skyline. The bulk of the infantry from positions on the reverse slope or on the flanks is used in an immediate counterattack against the attacker who, by the time he has gained the crest, is apt to be a bit shaken and disorganized. Counterattacks can of course, as has been noted above, be delivered over the top of the hill, or around the sides of the hill in a double envelopment. Naturally the employment of antitank weapons on reverse slopes and secondary ridges is a vital part of this type of defense.

No two pieces of ground will ever be exactly the same and the discussion presented above has purposely been limited. The points to bear in mind are that (1) in the organization of positions for defense or against counterattack, the habitual occupation of forward slopes can frequently be costly and ineffective; (2) good value may be obtained by organizing a reverse slope position, accepting shorter fields of fire, and placing all possible artillery and mortar concentration on the crest in front; (3) provided observation from other ground is assured, the reverse slope position is often superior.

Somewhere in the Book of Proverbs, it says that "Wisdom is before him that hath understanding." Next time, at the outset, maybe we'll make use of some of the lessons we've learned. But it's all in the book—as it always is. USMC

Mechanization of the Amphibious Attack

By LtCol Arthur J. Stuart



APART FROM CONVENTIONAL AND ATOMIC AERIAL bombardment, which we may leave for others to discuss and dispute, World War II produced three major innovations in warfare—the mechanized attack, the amphibious attack, and the airborne attack. Prior to the recent war, these new types of attack were in the embryonic stage. However, their wartime development was rapid and they skyrocketed from the category of minor, somewhat experimental, special operations to become primary instruments for the projection of military power through which strategic decisions were repeatedly achieved. And, although mechanized, amphibious, and airborne attacks were employed in coordinated and supporting combinations, sometimes simultaneously, it is not at all surprising that the next step, integration, was not achieved. World War II was too short to produce in anything resembling integral form either the amphibious-airborne attack, the airborne-mechanized attack, or the amphibious-mechanized attack. Nevertheless, such integration is logical and is clearly indicated for the future. And World War III, should it come, will probably bring the advent of all three.

There are indeed great possibilities in the cross-breeding of these three types.

The mechanized attack is a form of land attack. By virtue of superior firepower and mobility, it is today recognized as the *decisive* form of land attack. The amphibious attack is an attack from the sea, the airborne attack an attack from the air; both however include a land action phase characterized in the past by relative weakness. This weakness has been offset, at least in part, by the advantages of surprise and initiative resulting from the mobility upon which the success of these forms of attack has really depended. It follows that proper mechanization of either the amphibious or airborne attack would improve the quality of the land action phase. From the broad viewpoint, strategic mobility would be greatly increased in either case.

The third combination, the partial integration of the amphibious and airborne attacks, offers a potential increase in the mobility of the amphibious attack, strategically or tactically depending on the circumstances.

Part I: Cross-breeding of the mechanized, amphibious, and airborne attack would improve the quality of the land attack, increase mobility of amphibious phase, and would provide increased weight, power, and versatility for the airborne attack

From the airborne point of view, it would provide increased weight, power, and versatility.

Taking the last-mentioned combination first, let us consider the amphibious-airborne attack. It has most frequently been visualized by students of amphibious warfare as either (1) an airborne attack from the sea involving a helicopter ship-to-shore movement, or (2) an airborne movement to the objective area by seaplane transports.

Both offer intriguing possibilities worthy of investigation. But large-scale realization of either in the near future is most doubtful because of the technical obstacles involved. The amphibious-airborne attack (as presently conceived) has a further limitation in that the landing force would not be mechanized. The attackers would be at a tremendous disadvantage if confronted by hostile armor. In consequence, the amphibious-airborne attack, without mechanization, would probably be effective only in theaters precluding the employment of armor.

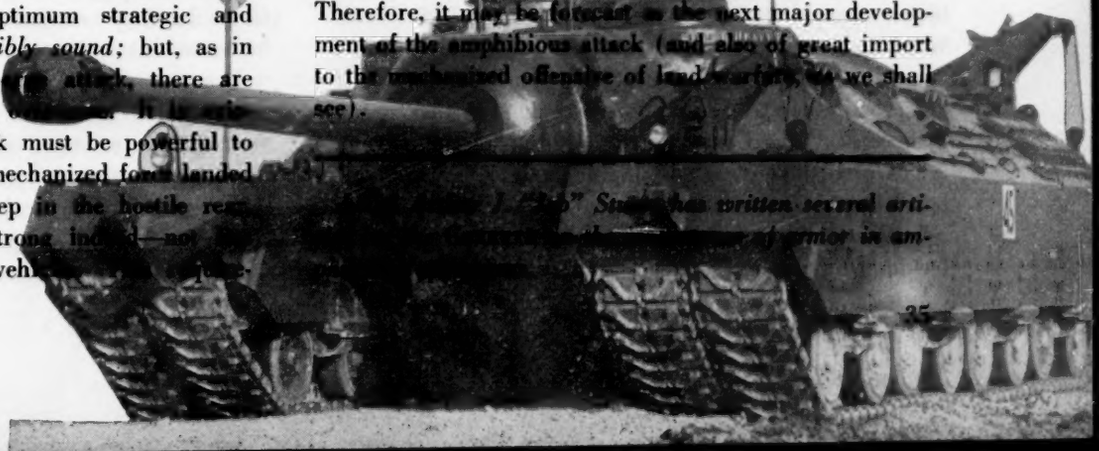
The question then arises whether either of the two previously described forms of amphibious-airborne attack could include a mechanized landing force. In both cases the limitations of associated materiel are so serious that this development seems very unlikely even in the distant future.

THE SECOND COMBINATION, the airborne-mechanized attack, offers greater immediate and long range possibilities. Gen Gavin and other authorities on airborne war have discussed at length in their postwar writing the potential advantages of combining the strategic mobility of the airborne attack with the tactical mobility and power of the mechanized attack. They have pointed out that the hostile rear (the decisive objective of the conventional mechanized attack) could be reached by vertical envelopment without the usual costly, time-consuming penetration. Some go farther and predict that the airborne force must have armor in quantity even to survive. The theoretical concept of the airborne-mechanized attack, incorporating optimum strategic and tactical mobility, is *incontrovertibly sound;* but, as in the case of the amphibious-airborne attack, there are serious materiel problems to be [illegible]. It is axiomatic that the mechanized attack must be powerful to be successful; and any separate mechanized force landed by air, and initially isolated deep in the hostile rear, would necessarily have to be strong indeed—not [illegible] than several hundred armored vehicles [illegible].

ment cannot be met by existing air transport in the case of heavy tank components, and only limited numbers of medium and light tanks and vehicles of comparable weight can be landed—and then only when landing fields or particularly favorable terrain exist. The future of the airborne-mechanized attack is thus tied to the development of air transport, which promises to be slow, certain practical limits (apparently) have already been approached in air transport design. Realizing this, airborne-mechanized enthusiasts have called for the development of a new family of light armored vehicles. However, the dominant weapon in mechanized combat is the tank; and unless a family of light-weight tanks can be developed with new and vastly superior characteristics to give them fighting power equal to conventional tanks, the capabilities of such a force would be severely limited. The disadvantage would become acute if operating against conventional heavy hostile armor. Indeed survival itself would be doubtful. Thus, the airborne-mechanized attack, although perhaps holding theoretical promise of revolutionizing warfare, is yet a long way off. Practical realization is *entirely dependent upon revolutionary new developments in the design of air transport or armored vehicles.*

In our search for possible forms of super-attack through combination of World War II's recent contributions to the offense, we come finally to the amphibious-mechanized combination. Because the amphibious and mechanized attacks were developed and employed, for the most part, quite independently on opposite sides of the globe, those with experience in the amphibious and mechanized fields are generally unfamiliar with the other. This is probably the reason that this most promising combination of all has to date been largely overlooked. For the amphibious-mechanized attack not only offers great theoretical possibilities—it is also practical on a general scale today.

It provides the maximum combination of strategic mobility, tactical mobility, and power realizable today. Therefore, it may be forecast as the next major development of the amphibious attack (and also of great import to the mechanized offensive of land warfare, as we shall see).



[illegible] "Bob" Sturgis has written several articles [illegible] of armor in am-

Mechanization would not only greatly extend the capabilities of the amphibious attack, but from many considerations actually appears to be essential to its future success. It is generally conceded that the post-war modernization of the amphibious attack of World War II must be thorough and fundamental. Future amphibious doctrine must provide positive solutions to certain serious problems which may be forecast now for the future—or the amphibious attack will be in danger of reverting from its newly established position of preeminent success to its previous limbo of the desperate gamble. There are many compelling reasons which dictate that when the amphibious attack completes this metamorphosis it will emerge with a hard shell of armor.

BOTH GEOGRAPHY and current military trends abroad indicate that defense against amphibious attack will be mobile rather than a fixed infantry beachline defense. The military world has seen the consistent defeat of the fixed infantry waterline defense, and has had ample opportunity to note its ineffectiveness in stopping the amphibious attack. Yet, if any future enemy had not learned that lesson, simple geography would largely preclude its use in theaters involving coasts hundreds or thousands of miles long. Linear coastal defense would require prohibitive dispersion and dissipation of strength. The mobile defense built around armor, artillery, and aviation is logical from every consideration. *It is so logical that it must be anticipated and its impact on the amphibious attack carefully evaluated now.*

The amphibious attack of the past is geared too slow to cope with the geographic time and space factors of future amphibious theaters. It is poorly adapted to cope with the most probable type of enemy defense. The issue of battle is always decided, in the absolute sense, by the determinants of fire power and its control, or, in short—*by fire.* If an enemy can effect a more rapid build-up of firepower at the landing area, the amphibious attack *will inevitably be defeated* and be thrown back into the sea. Just as certainly, if at any time during or after a landing the enemy can bring to bear equal (or even inferior) forces of, greater mobility —the landing force faces the same fate through defeat in detail.

Something, then, must be done about the amphibious attack. It cannot remain frozen in its World War II form, despite brilliant success under World War II conditions. If it is to cope with a mobile defense, its tempo must be stepped up so that objectives can be seized prior to the build-up of the enemy's forces even though they be highly mobile. Final beachhead lines, key terrain features—all will have to be seized much more rapidly than hitherto. This cannot be done by infantry attacks; foot infantry simply cannot move rapidly enough. *But it can be done by mechanized attack.*

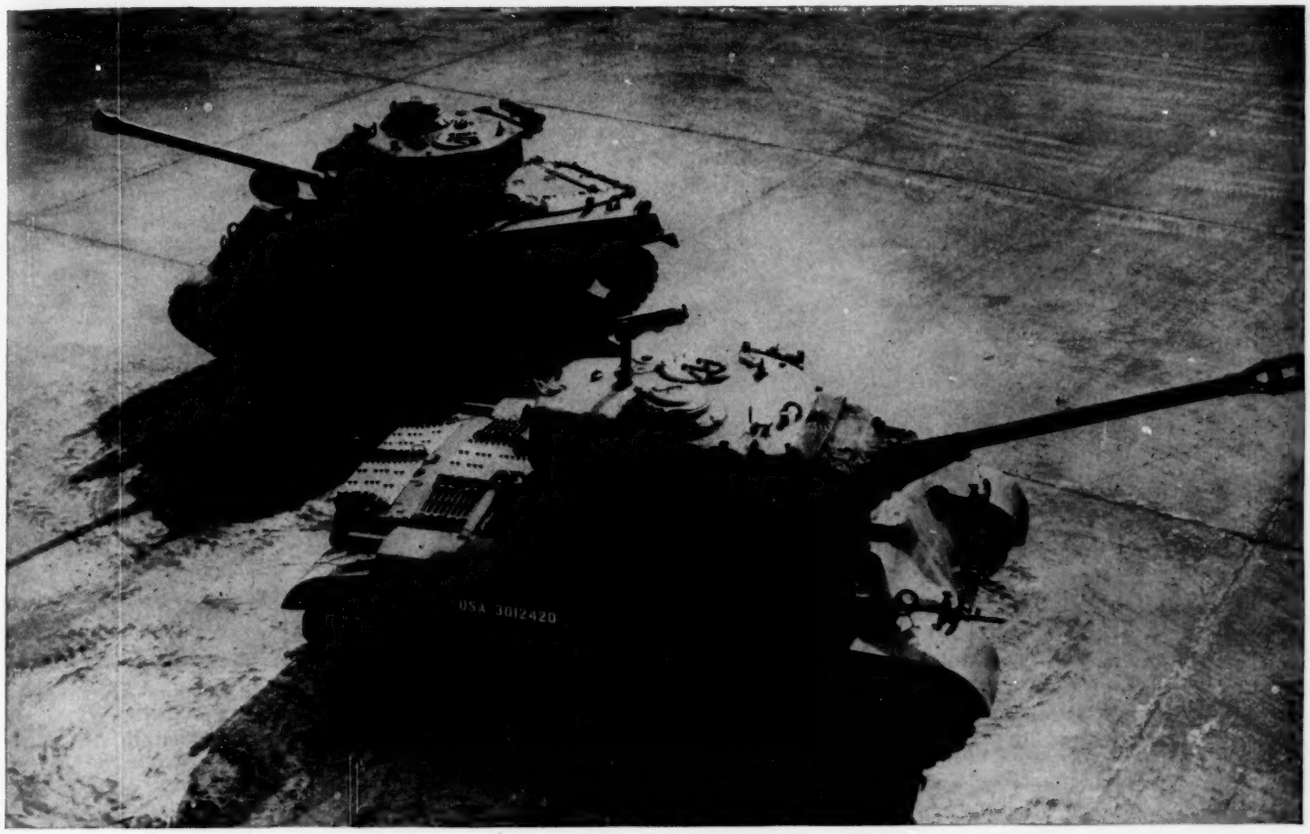
In addition to these over-all considerations, there are specific weapons likely to be employed in strength by any future enemy for which the amphibious attack must find answers.

The probable deluge of airburst projectiles calls for a definite antidote. For there is a density of airburst artillery concentration, easily calculated, through which slow moving, unprotected, dismounted assault troops simply cannot move and survive in effective strength. Such fires, had they been maintained for only a few minutes over the beaches of the last war, would have destroyed or crippled landing force assault power. Although more effective naval gunfire and air bombardment may be expected, it unfortunately remains extremely doubtful if either arm will be capable of destroying more than a minor fraction of the enemy's artillery before a landing. Artillery is never placed along the waterline, that zone smothered and pulverized by bombardment; it is either dispersed, dug-in and concealed well inland to fire from position, or held in reserve deeper inland to be displaced rapidly to the landing area as the landing develops. Hostile artillery alone is capable of inflicting disaster on the amphibious attack of past slow tempo and concentrated targets. And if an enemy curtains his artillery firing positions by smoke during actual firing—what is the amphibious answer to the defender's artillery? The answer is armor, armor for all assault elements. The answer is the *mechanized landing force* to develop power swiftly ashore, to drive rapidly over and beyond the beaches, to gain quickly dispersion space ashore and to seize the enemy's observation and artillery positions through a lightning blow.

BUT FUTURE landing forces must not only be resistant to airburst artillery fire: The future amphibious attack must expect, and be proofed against, armored counterattack at any time during and after the landing phase. From the amphibious viewpoint the modern tank is a most formidable potential antiboat gun—armored, self-propelled, and capable of accurate, semi-automatic, long or short range, cannon fire. It may be stated categorically that if a landing force ever allows any large number of hostile tanks to penetrate to its landing beaches, its ship-to-shore movement will be most seriously jeopardized.

Positive antitank protection of the ship-to-shore movement will dictate the early landing of tanks in strength, for assured antitank protection is largely predicated upon superior tank strength. Obviously, time factors will become of critical importance in the seizure of critical terrain features.

Over and above the need for positive antitank pro-



The Patton tank, the latest U. S. Army tank, is more maneuverable than Sherman, which is now used by the Marine Corps. Greater mechanization is next logical step in amphibious development.

tection of the ship-to-shore movements, landing forces newly established ashore must themselves be capable of withstanding armored counterattacks. This again means tanks in strength. It also virtually imposes the general mechanization of the landing force to provide equal or superior mobility to the enemy's. The alternative of inferior mobility would not only prohibit any real anti-tank defense but would also seriously prejudice, if not preclude, successful offensive maneuver.

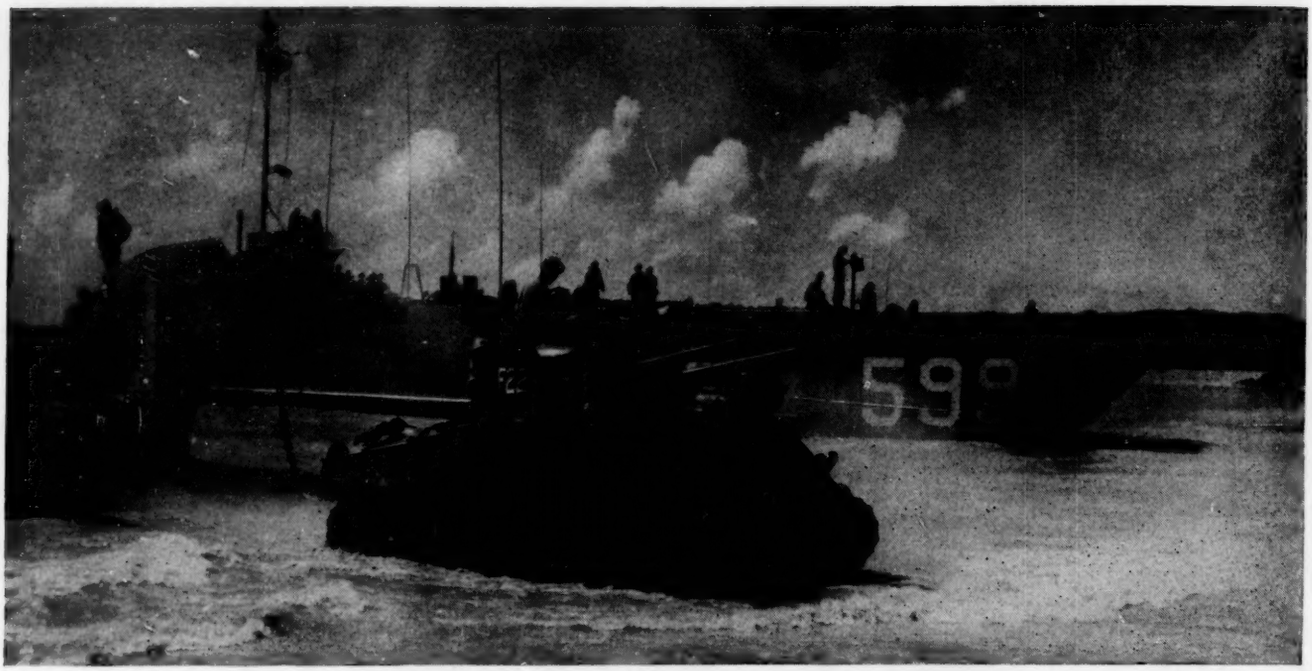
However, the mechanization of the amphibious attack has broader significance than mere essential modernization. Beyond offering the greatest certainty of success, the mechanized landing force would give the amphibious attack new usefulness and broader capabilities.

The amphibious raid could be made a powerful and fearsome thing—capable of striking objectives deeper inland with much greater rapidity and far more devastating effect than hitherto.

The diversionary amphibious attack (in support of land operations) would become far more diversionary to the enemy if the landing force were mechanized—and so that amphibious role would become more effective.

And there is more. *The usefulness of the amphibious attack to seize a beachhead for the initiation of land campaigns would be vastly increased.* If a future mechanized landing force can seize a beachhead within a period of hours—rather than days or weeks as in the past—*the gain in strategic-tactical surprise* for subsequent land operations (of all types) would be great. In the case of armored operation this gain would be of the *utmost importance*, for the seizure of beachheads has hitherto been *too slow* to permit the advantageous launching of armored operations from them. This slowness has permitted the enemy to build up his forces in containment before beachheads had become established to a usable degree, in effect requiring a breakthrough before armor could possibly spring inland in exploitation. Thus, the past *slow speed* of the "infantry" amphibious assault has in itself seriously restricted the initiation of land campaigns from beachheads; in fact, lack of "amphibious velocity" alone has (to date) precluded the direct initiation of mechanized land operations from a beachhead, and so has robbed the amphibious beachhead of its direct usefulness from the armored viewpoint.

Analysis of trends in ground warfare reveals two general phases of the offensive—the breakthrough and exploitation. Breaking through the enemy's immediate forces is but of local significance unless the local vic-



Flame throwing tank comes ashore on Red Beach 2 during Vieques-Culebra maneuvers. Positive protection of the ship-to-shore movement will dictate the early landing of tanks in strength.

tory is exploited. The exploitation phase is the decisive phase, with the breakthrough but a necessary preliminary. Armored units moving with maximum speed achieve the destruction of the entire force by striking directly at the enemy's rear establishment, his command and logistic installations, communications, and reserves—the very heart of the enemy military machine, not its tentacles. It is in the enemy's rear, where coordinated and strong defenses do not exist, that the mechanized attack can drive to decisive objectives before the enemy can bring his mobility and power to bear.

But all this depends on gaining the hostile rear. It could be gained by sea envelopment, rather than through the siege tactics which in the past often have given the enemy sufficient time to mass armored reserves to prevent or limit exploitation. Beachheads in the hostile rear could be seized from which armored units could attack the hostile front from the rear to effect rapid penetration. The main armored forces could then follow up for the decisive exploitation—or perhaps strong armored forces could be moved around the enemy's sea flank to initiate exploitation operations against major hostile rear objectives directly from the beachhead. In either case, the decisive blow could be delivered with far greater surprise than through the conventional breakthrough, and certainly with far less cost.

To pursue this concept further, the enemy's problems of defense in land warfare would immediately be multiplied. In the past the enemy could establish a continuous defensive zone in depth, echelon reserves and otherwise concentrate his forces to advantage along a linear front. However, it would be manifestly impossible for him to achieve any such coordinated defensive strength also along his entire coastline. Thus the threat of sudden mechanized (or even infantry) attack in flank or rear from "beachheads which weren't there the day before" would pose for the enemy an extremely difficult problem.

So if the success of the future mechanized land offensive depends so largely upon gaining the hostile rear as it has in the past, exploitation of amphibious mobility as described could not but result in great new advantage. As offensive armor thus increased its mobility, defense against it would become proportionately more difficult. *The lightning amphibious seizure of beachheads by mechanized landing forces is thus a major potential corollary of the mechanized land offensive.*

But there may be some who will say, "it sounds good, but it's not practical!" It may be averred that shipping limitations are insurmountable, that a limited beachhead must first be seized to permit the assembly and coordination of fighting vehicles ashore before commitment, that the mechanized landing force cannot be supplied, that artillery support cannot be provided, beach mines and obstacles cannot be overcome—and so on. There are indeed practical problems. But all can be resolved.

The amphibious and mechanized attacks are both well known, tried and proven. With vast experience in each and complete mastery of the execution of

each separately, *the problem is really but a matter of adaptation of the mechanized to the amphibious.* The practical task assumes smaller magnitude when considered in this light, for there is actually a great deal to go on.

All general characteristics of amphibious and mechanized combat support and favor the realization of the amphibious-mechanized attack. The beach assault always has been, and always must be, launched against defenses weak at the time of assault—weak either as a result of surprise effect or through reduction by pre-landing bombardment. In land warfare the mechanized attack has been most successful against weak defenses. The essential conditions for successful mechnized action in respect to immediate hostile capabilities thus already exist in the amphibious attack. Denial of the air to the enemy is already a requisite of the amphibious attack. It is highly favorable, if not essential, to successful mechanized action. The amphibious assault depends on overwhelming power for success, as does the mechanized assault. Very strong air and naval gunfire support is available to the amphibious landing force; vehicle-borne forward observers and limited modification of control techniques are all that is needed to adapt this support to the increased tactical mobility of a mechanized landing force. Thus, the major over-all conditions essential to success exist with remarkable similarity in the mechanized and amphibious forms of attack.

MECHANIZATION of the landing force need not await, and is not contingent upon, either the evolution of new amphibious materiel or the birth of a new family of armored vehicles. Present amphibious shipping, landing craft, and other materiel can transport and land a fully mechanized landing force. All classes of armored vehicles, including heavy tanks, can be landed—either directly from landing craft or equipped with flotation devices and launched close off the hostile shore. Moreover, armor can be landed in necessary mass. It will be recalled that the World War II amphibious attack comprised a great many armored vehicles, including tanks, armored amphibians, and amphibian tractors. Each assault division in Pacific operations normally landed some 50 tanks, 75 armored amphibians and over 200 amphibian tractors in the general assault, followed by hundreds of wheeled vehicles. In the Normandy landing the first two assault waves of certain units consisted solely of tanks, with self propelled artillery landed in strength in the first hour of the landing. Even though special conditions precluded any general mechanized action ashore in Pacific operations, it will be recalled that more and more combat vehicles were added to the Pacific amphibious attack—until it became *fully mechanized in the over-reef beach approach but reverted to primarily dismounted action at the beachline.* The mechanized amphibious attack that we visualize for the future is but one step farther—a mechanized attack *over and beyond* the hostile beach—the feasibility of which has been amply demonstrated.

In searching for historical precedent the reader may recall the spectacular (if small scale and somewhat abortive) mechanized thrust over the Saipan beach on 15 June 1944. Some may see little significance in that successful drive over the beach and some 2500 yards inland by an armored amphibian company, since the light force was driven back by tank-led counterattack about four hours later with the result that the ground gained had to be retaken by costly hours of fighting. However, on more careful thought, can that remarkable exploit be evaluated as other than the strongest evidence of the practicability of the mechanized amphibious attack? Employing vulnerable armored amphibians instead of tanks, without any type of direct support, without covering infantry or engineer assistance, and even with open flanks because of failure of adjacent units to drive home the bold maneuver—that small force yet drove deep inland close behind the pre-H-hour bombardment, capitalizing on its stunning effect to overrun rapidly a once heavily defended and fortified area in a matter of minutes. Even then the daringly gained salient might have been held—permitting much earlier landing of artillery and reserves as well as greater dispersion ashore (with probable reduction of casualties suffered from Japanese artillery and mortar fire)—had follow-up troops but been pushed rapidly behind the mechanized assault. Lack of depth and failure to provide support constituted the true causes of the failure. But the very fact that the unsupported Saipan mechanized amphibious task force could achieve the success it did should dispel all doubts concerning the practical potentialities of the large scale, tank-led, fully supported and properly coordinated mechanized amphibious attack.

IN CONCLUSION, the writer believes that the mechanization of the amphibious attack *is a logical and inevitable development, necessary to insure future* amphibious *success and prevent future amphibious disaster. More than this, it is a development which can be predicted to broaden and extend amphibious application and usefulness, to open important new amphibious roles.*

The fully mechanized landing attack is an entirely practical development within the general framework of amphibious and mechanized tactics and employing standard materiel—although some modification of techniques and certain improvement of materiel is desirable. These and other aspects pertaining to the execution of the amphibious attack by a mechanized landing force will be discussed next month. to be concluded.

In Brief

Eight C-119-B Fairchild "Flying Boxcars" will be delivered to Air, FMF, Atlantic, headquarters at Cherry Point, N. C., after shakedown tests at the Patuxent Naval Air Base, the National Military Establishment announced recently. Designed to carry a cargo load of nine tons for a range of 2,000 miles, the boxcar-like fuselage of the C-119-B has ample space for a pay-load of more than 10 tons. The craft is capable of accommodating 42 fully-equipped combat troops as well as 20 parachute cans of supplies suspended from an overhead monorail. Two Pratt and Whitney Wasp Major engines give the C-119-B a speed of about 200 mph.

The "Zero Reader," Sperry's new navigating and landing aid, is being tested by the Air Force. The device has a simple two-element indicator which tells pilots precisely how to move the controls to steer right or left or to go up or down. The zero reader combines cockpit information ordinarily supplied by the gyrohorizon, directional gyro, magnetic or gyrosyn, sensitive altimeter, and the instrument system cross-pointer meter.

Three electric escalators have been ordered by the Navy Department for installation, one aboard each of the three carriers of the *Essex* class, according to the Westinghouse Corporation. The first "moving stairways" to be used aboard any warship will be capable of carrying 30 Navy pilots a minute from the hangar deck up to the flight deck 28 feet above.

Subzero Arctic conditions will be simulated in the new low-temperature test facility which is now under construction in the internal-combusion engine laboratory of the Naval Engineering Experiment Station at Annapolis, Md. Temperatures as low as 85 degrees below zero will be produced. This new facility had been designed for the testing of internal-combustion engines, their parts and accessories, plus fuels and lubricating oils. It is also probable that a 5-inch gun mount will be installed for the purpose of testing hydraulic oils. It is believed that this will be the first testing facility allowing the installation of full-scale Diesel engines for the purpose of determining their starting characteristics at very low temperatures.

Production of the electronic flight simulator, which has been called one of the most fundamental advances in flight training in the history of aviation, is now well under way. Air crews, using the trainer, can now learn to fly a particular type of plane without ever having seen one, or even before any plane of that type is actually built. The trainer creates, in a closed and motionless compartment, the conditions, including emergency conditions, of actual flight. Thus an experienced air crew can, in a few hours, go through and learn to meet almost by reflex action a series of emergencies which its members might fly for years without encountering.

A new-type aviation oil tank capable of withstanding fire and temperatures of 2,000 degrees Fahrenheit has been developed for the United States Navy by the B. F. Goodrich Company. The container, first one of its kind to withstand direct flame, is also bullet-sealing, which increases its value for use in naval aircraft. An outer coating in which American-made rubber is combined with other materials give unusual resistance to heat and fire. The company said the material may be applied also to gasoline tanks and other containers for volatile fuels.

Flight training will be given to student flight surgeons attending the School of Aviation Medicine at Randolph Air Force Base, San Antonio, Texas, the Air Force has announced. Objective of the course is to give student flight surgeons a practical understanding of, and approach to, the physical and mental problems which confront flying personnel. The 10-week course, conducted by Air Training Command, will consist of six weeks of basic flying training and four weeks of diversified flight indoctrination.

A new solid-propellant booster rocket with a ground-level thrust considerably in excess of that developed by the German V-2 has been flown successfully at the Naval Ordnance Test Station, Inyokern, Calif. The new booster rocket, as yet unnamed, is believed to be the largest solid-propellant rocket yet flown. Its recorded velocity is high in the supersonic range. The rocket was designed for use in the initial launching of supersonic missiles, especially those relying on the ram-jet engine for propulsion.

According to Marine Corps Technical Bulletin 1-49, dated 7 February 1949, the following procedures are recommended for the cleaning and care of field shoes. Scrape dirt or mud off shoes with a dull instrument that will not cut the leather. To wash, soften, and preserve the leather of the shoes, use saddle soap. After removing dirt or mud, vigorously rub generous quantities of saddle soap into the shoe uppers with a rag or sponge. If requirements exist for improving appearance of field shoes over that obtained by cleaning with saddle soap, dyeing of the shoes with a brown mahogany dye is authorized. If in special cases a need for a waterproofing agent should arise, Impregnite, shoe, M1, a chemical warfare item, is satisfactory.

Plans for teaching and explaining fundamentals of democracy as part of the basic training of recruits in the armed forces were announced recently by the Personnel Policy Board of the National Military Establishment. This course in basic citizenship will have a major objective of offsetting subversive propaganda directed at members of the armed forces. Primarily, it will be designed to give recruits who have lacked educational opportunities a clear understanding of the democratic traditions, customs, and principles upon which the American way of life is based. The course will be uniform for all the services and it is planned to put it into operation next fall.

Marine Corps Memorandum Number 34-49, dated 13 April 1949, states that personnel of the rank of sergeant or below are transferred by name only in the following cases: (1) Assignment to a school. (2) An assignment made to permit the marine concerned to assist in alleviating family hardship. (3) Assignment to special type duty wherein special qualifications are required to fill a billet. (4) Enlistment being extended for assignment overseas or special assignment.

A new instrument which automatically and continuously records a ship's course has recently been developed. This "ship steering recorder" marks the ship's rudder position and compass direction and calculates any deviation from the set course on a moving roll of paper. Nine of the instruments have been delivered to the U. S. Navy for experimental installation in several destroyer and submarine chartrooms. The device can detect an error in course as slight as two-tenths of a degree.

World-wide examinations will be held 20 July to screen Navy and Marine Corps candidates for entrance into the Naval School, Academy and College, Preparatory, at Bainbridge, Maryland. From this group successful candidates will be assigned to the school in October, 1949 to prepare for the Naval Academy entrance examination, which will be given in April, 1950. The Bainbridge school operates from October through May to prepare students for this examination. Personnel must be recommended by their commanding officer in order to take the screening test on 20 July. Not eligible for the program are Navy Enlisted Volunteers and Marine Corps Volunteers, who are on active duty under one-year enlistments, and who cannot extend their enlistments.

Recommendations concerning equipment employed by landing forces in amphibious operations are requested in Marine Corps General Order Number 22, dated 25 April 1949. Desired recommendations include those pertaining to new items of eqiupment, with their proposed characteristics; modifications to improve existing landing force equipment; field expedients used to improve such equipment; and recommended changes in allowances and expenditure rates. The request is in furtherance of the National Security Act of 1947 which states "It shall be the duty of the Marine Corps to develop, in coordination with the Army and Air Force, those phases of amphibious operations which pertain to the tactics, technique, and equipment employed by landing forces."

According to Marine Corps Memorandum Number 27-49, dated 23 March 1949, enlisted personnel are arriving at the Marine Barracks, U. S. Naval Station, Treasure Island, San Francisco, California, for further transfer overseas with marked discrepancies in clothing and service records. In order to eliminate additional work on the part of activities through which personnel ordered to duty overseas are passing, commanding officers are requested to initiate a system within their organizations which will prevent these administrative oversights, the most frequent of which pertain to Article 1-39, MCM, Letters of Instruction 1609 and 1504, Manual Medical Department, Part 3, Chapter 5-B, and BuS&A Manual 54602 7-b.

Field Firing

By LtCol Noah J. Rodeheffer

WITH THE ADVENT OF THE ATOMIC BOMB, LONG range heavy bombers and all the massive machinery of modern warfare, it is easy to lose sight of the importance of the individual marine and his weapon. Still this is the backbone of Marine Corps strength, as has been amply demonstrated on scores of obscure and well known battle fields through out the whole history of the Corps.

The principles of marksmanship are familiar to most marines, at least they have been exposed to rifle range training. Comparatively few, however, get any further training in the use of their individual weapons than these qualification and familiarization courses. We start by training a marine in markmanship. He learns to take position, align the sights, hold his breath, squeeze the trigger and call the shot. A comparative few, who are interested enough and have the opportunity to participate in Division and Marine Corps Matches, also learn to read the wind and to make adjustments for it. All our training is on known distance ranges, and most of the firing at distinct bullseyes in the middle of a paper target. All this is necessary, but should be considered preliminary training and not the final objective. When facing an enemy on the battle field, the final test of our training, we must instinctively do all those things which we have learned in rifle marksmanship training, in addition to estimating the range and wind and applying the proper correction. We must do all these things better and quicker than the enemy, knowing that he'll be shooting at us while we do it.

The Marine Corps Manual states that it is desired that each man fire a field firing course after completing record firing. Marine Corps General Order No. 5 sets up an ammunition allowance of 30 rounds per man for this field firing. The purpose of this article is to suggest some methods of using this ammunition to advantage.

Recently I had the good fortune to be able to spend several weeks in Sweden, and while there was able to observe the field firing as practised by a large number of their citizens, both civilian and military. I'll describe what I saw of their methods, because I believe them to be applicable to a great degree to our own problem of training marines.

The Swedish course was laid out in rolling country, with alternating woods and open spaces. The various stations were so located that firing could be safely conducted on all simultaneously, and patrols could safely pass from one to another during the firing. No attempt was made to keep the firing points close together, they explained that a half mile or a mile hike between firing points added to the realism of the problem.

As the shooters came to the firing point, the officer in charge of the starting formed them into patrols of six or eight. Each man fell in on a numbered stake, and retained this number throughout the shoot. At each station he took position beside a similar numbered stake and fired at that number target.

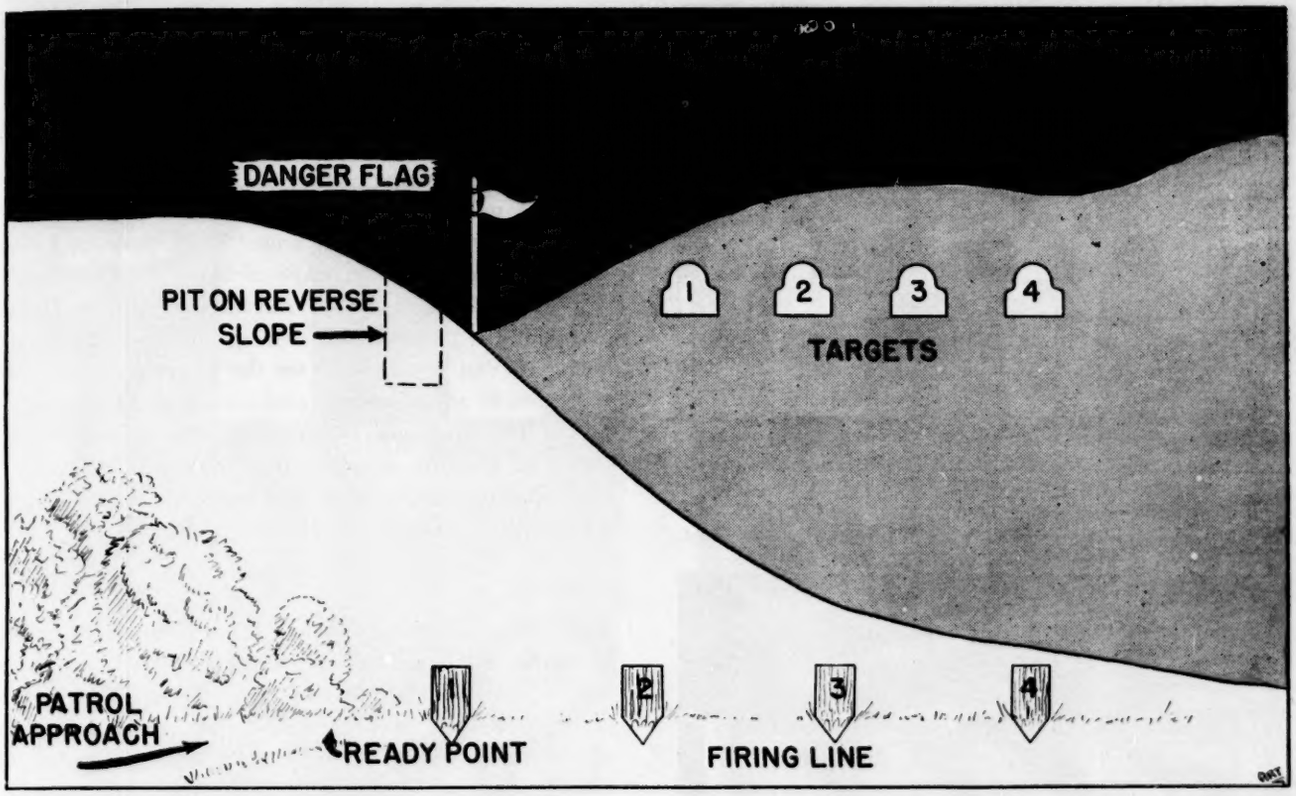
The first stage was a known distance range, a silhouette target at 300 meters. Each man fired five shots in 40 seconds. The targets were withdrawn into a pit, each man's shot group plotted on a miniature target, and this miniature target presented to him for use in sight adjustment.

THE PATROL then proceeded to the next station. They were halted in a small gully, the targets not visible. The officer in charge told them to load, then when all were ready, led them at a trot to the firing line, about 70 yards away. Forty seconds were allowed to move to the line and take position, then 30 second to fire five shots. Each man's target was the size of a man's head, at a range of about 150 yards. Range had to be estimated, wind judged and sights set, all within the time limit. As soon as cease firing was given, a target detail came out of a sheltered position near the targets, signaled the hits, pasted the holes, and the patrol moved on to the next position. Each man's score was kept on a small card carried by the patrol leader, and filled in by the officer in charge of the station.

At the next station the patrol was told to load, then conducted to the firing position from which the targets could be seen. They consisted of prone silhouette targets at a range of approximately 400 yards. Forty seconds were allowed. Again range and wind had to be estimated, and the proper corrections made, all within the time limit. It seemed that each station was laid out in a different direction, so that the wind effect changed at each one.

Patrols followed each other at intervals of seven to nine minutes. The course was laid out so that they could move without danger.

No targets were visible when the patrol arrived at the third firing point. Some of the shooters immediately got down into the prone position and prepared to fire. Others stood up and looked around for targets, then rushed off their shots when head sized targets suddenly were exposed for 30 seconds about 200 yards to the front.



The first stage was a known distance range, a silhouette target at 300 meters. Five shots were fired at 40 seconds. The hits were plotted on miniature targets to facilitate sight adjustment.

The fourth ready point was behind a small ridge. After loading the shooters were told to advance and fire without further command, and the time started. Fifty seconds later cease firing was given. During that time the shooters advanced to the top of the ridge from where the targets could be seen, took position, estimated range and wind, and fired five shots at head sized targets about 200 yards away.

AT THE FIFTH station no targets were visible, only a row of window frames about 175 yards away. No one was caught napping this time, all got into firing position and loaded. Suddenly a head sized target was exposed in each window. The targets were exposed seven times, one second exposures. A long cord was used by the target detail to pull the targets up into position, then they were permitted to drop out of sight.

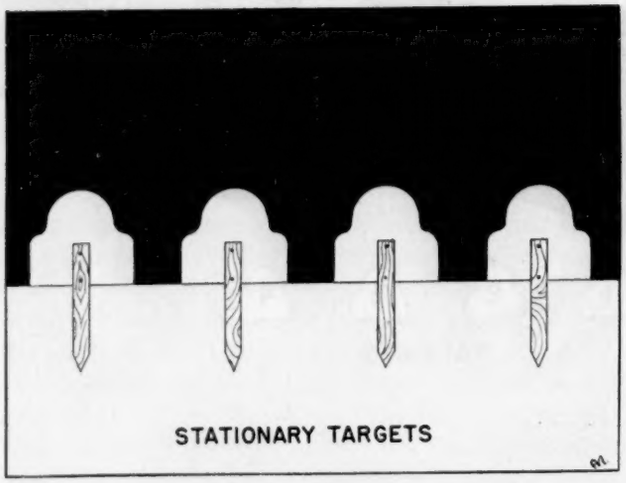
The sixth station revealed two targets for each shooter, one at about 100 yards, and the other at about 250 yards. Not more than three hits were counted on either target. Thus the shooters were forced to reset their sights within the time limit.

In order to provide a basis for scoring, the number of rounds fired at each station was limited to five. No positions were prescribed, each man selected any position he wished to use. Some of the shooters set their sights for each stage, others kept one sight setting, but judged the range and wind and held for the proper correction.

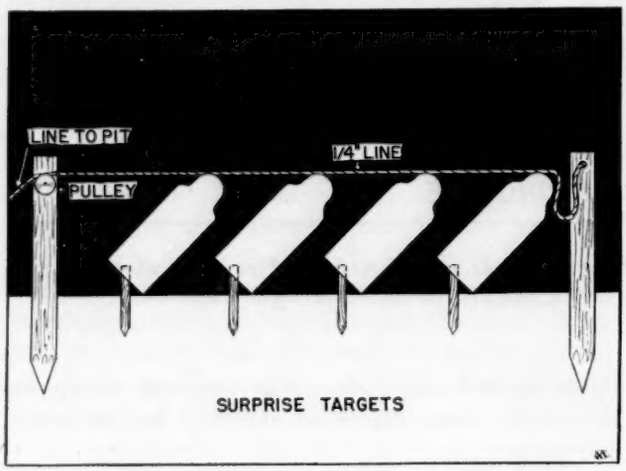
Scores made were surprisingly good, considering the fact that the ranges were unknown, the time limits short, and the targets small. The winner of the day's shoot had over 90 per cent hits. In order to accomplish this he needed to know his rifle perfectly, to estimate range and wind automatically and accurately, and to be an accomplished rifleman.

Similar courses were fired with the pistol, distances and types of targets being altered to suit the weapon. Surprise, swinging, and stationary targets were used, and in one case the targets were on a log which was towed by a long rope across an open space in a body of water, simulating a man swimming. Barricades were erected at the firing points, so that the shooters were obliged to use a variety of positions, standing, crouching and prone. Some stations were so located that the shooters fired down a steep hill.

Ample space is available near most of our large Marine Corps posts to conduct this type of training. The first stage of the course should be laid out at a known distance, which should be about the average of the ranges at the other stations. The targets at the first station should be large enough to insure hits on the target, even



Stationary targets were fired on at 400 yards. Forty seconds were allowed to move onto the line and fire.



Surprise targets were used at 200 yards with firers being required to make adjustments for range and wind.

though the weapon may not be sighted in. The "A" target is satisfactory. It may be stationary, if the course is so laid out that the patrol moves to these targets to see their groups and to paste up, before moving on to the next station.

The terrain to be used for this training should be carefully studied before laying out the course, in order to use it most efficiently. Stations must be located so that fire from one will not endanger personnel at any other station, or patrols moving between stations. Trails between stations should be well marked so that patrols will not get lost and wander into a danger area.

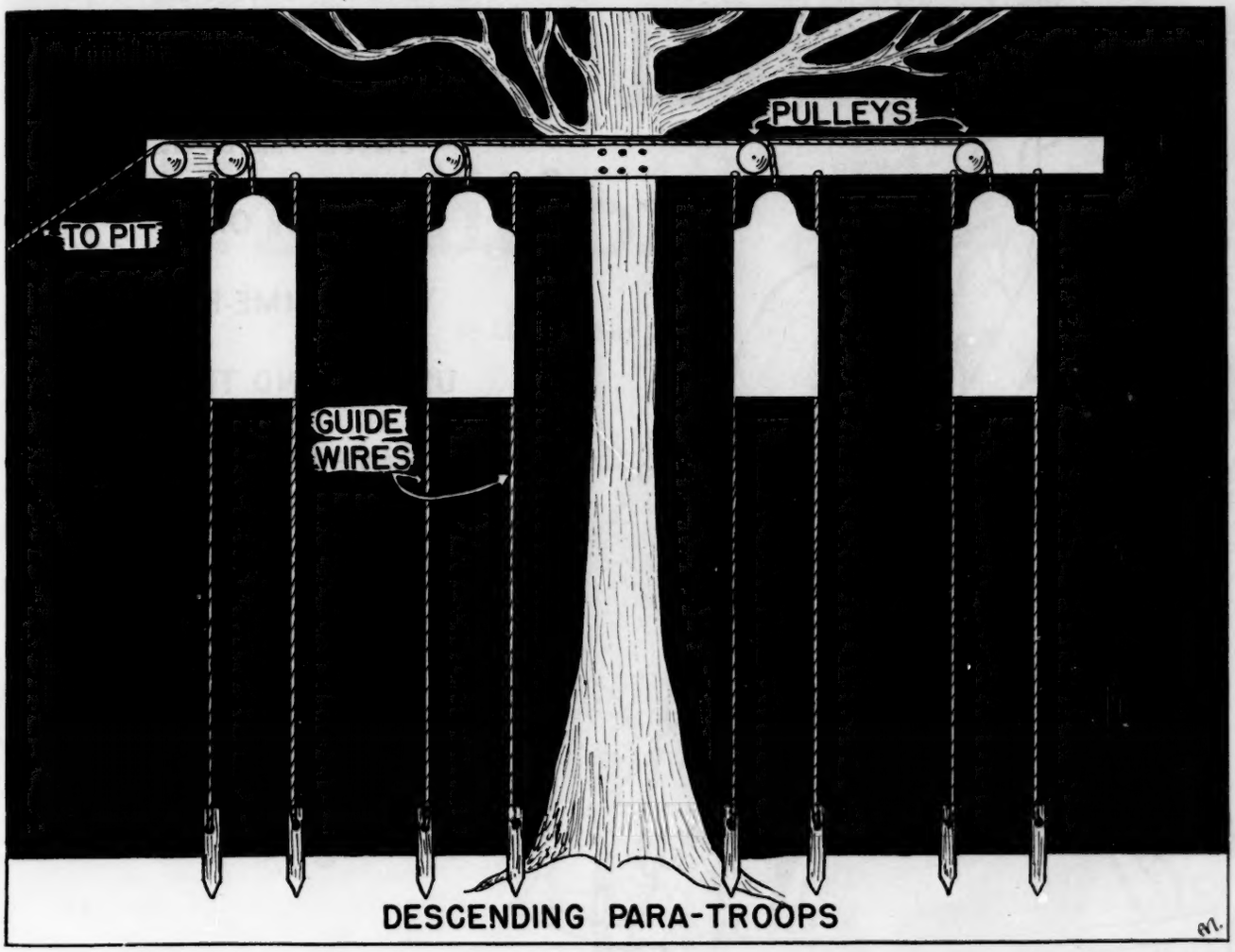
A great amount of variation in ranges to be used is permissible, provided the size of the targets used is kept proportional to the range. The size of the targets should be such that an alert scout would be expected to observe an enemy of similar size. For instance, up to 200 yards a target the size of a man's head could be used, a prone silhouette, from 200 to 300 yards, and a kneeling silhouette at greater ranges. The same targets may be used for various weapons, for instance the rifle, automatic rifle, or carbine. Alternate firing points may be provided to vary the course and to keep the ranges appropriate to the weapon used. This effects an economy in construction of the course, since it is easier to drive stakes to indicate a firing point than to provide cover for the target at the target area. The course may also be varied on succeeding days of firing by moving the targets for short distances, still in the vicinity of the cover for the target detail. Firing points should be selected, so that in order to see the targets, the shooters will have to adopt various positions at different points. At the longer ranges prone firing should be possible, sitting or kneeling at intermediate ranges, and standing on at least one station at a short range. Surprise targets may be used, operated by the target detail using a line or wire.

THREE SHOTS are sufficient at each station. In battle, an enemy will not be likely to expose himself for more than a few seconds. Marines must be taught to get a hit with the first shot, then to follow up rapidly with several more. They should be taught to observe wind direction and strength and to apply the proper correction, then to observe the bullet strike and make further correction if necessary. Normally this correction will be made by holding over. At the longer ranges sights should be set before firing the first shot. At the shorter ranges, and especially at the less steady positions, it is better to keep one sight setting and to hold up or down according to the range.

A ready station should be prepared and plainly marked, on the trail just before arriving at the firing point, but at a place where the targets cannot be seen. This point can be selected so that a barricade of trees or a hill will screen the targets. The officer in charge of the firing point will meet the patrol here, check to see that all shooters are present, order them to load and lock, then conduct them to the firing point.

Each firing point should have numbered stakes indicating the exact firing points, and corresponding to the numbers on the target. Commence firing and cease firing is signaled by the officer in charge of the firing point by a single whistle blast. Two short blasts after cease firing will indicate to the target detail that it is safe to come out and mark the targets. The officer in charge of the firing point must insure that all weapons are unloaded before allowing the shooters to leave the firing line.

Cover must be provided for the target detail near each set of targets. Natural features, such as a small hill may be used if available, otherwise a pit should be dug. Each target detail should be provided a red flag fastened to a pole so that it can be plainly seen from the firing



A great amount of variation can be introduced into field shooting. Firing points can be selected so that in order to see the targets, shooters must use either kneeling or sitting position.

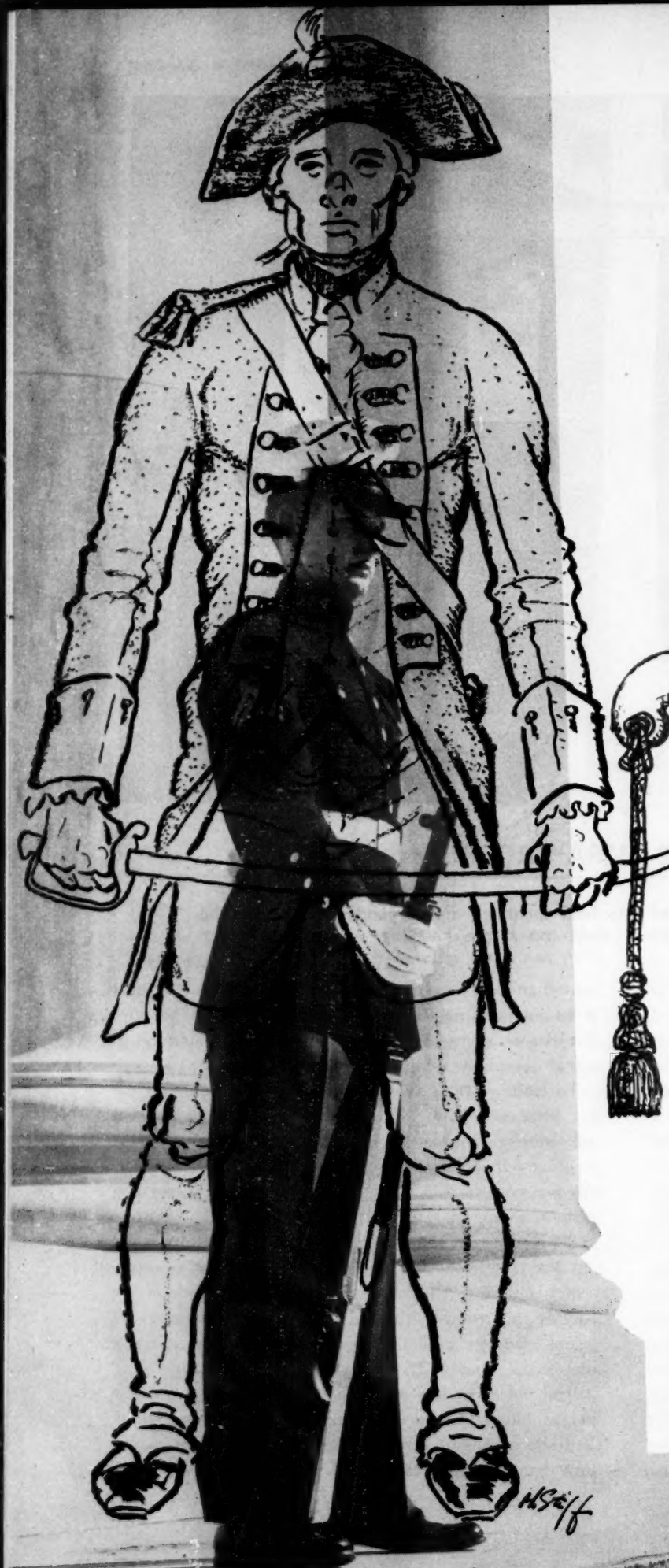
point, the flag to be raised during marking the targets or if for any reason it is not safe to fire, and lowered when the target detail is under cover and it is safe to fire.

Hits on each target are signaled by one member of the target detail standing directly behind each target in turn and raising a small flag over his head once for each hit. After the hits are signaled, the target detail pastes up the holes and returns to cover, the officer in charge of the firing point enters each man's score on his score card, the shooters police the firing point, and then the patrol moves on to the next station.

A great amount of variation can be introduced into this field shooting. Barricades can be erected, or firing points selected so that in order to be able to see the targets, the shooter must use the kneeling or standing position. Ranges can be varied to suit the terrain, and appropriate sized targets used to correspond to the range. Location of firing points and targets can be varied for succeeding details using the field firing range, so that none of the shooters will be familiar with the course beforehand. The objective is to have unknown targets at an unknown range, over an unknown piece of terrain. Surprise is an essential element, just as it would be in actual operations against an enemy.

To train marines in field shooting we should use the fire team as a unit. Each man's score should be kept individually, in order to encourage competition and also to point out the man who is not getting hits, so that he can be given further instruction. Fire team, squad and platoon competition should be encouraged. The platoon and squad leader should not make the mistake of picking out his best shots and concentrating on them to represent his unit. All marines in a squad or platoon are equally important in the fire fight, and the training job is not complete until the poorest member is an effective one.

The measure of success should be "hits per weapon per minute." In the final analysis it's hits that count, and the successful fire team, squad, or platoon is the unit than can inflict casualties on the enemy. USMC



HAVE WE HELD TO OUR OLD WAYS? HAVE WE EVOLVED NEW ONES? WHAT TIME-HONORED USAGES AND TRADITIONS HAVE LAPSED? WHY?

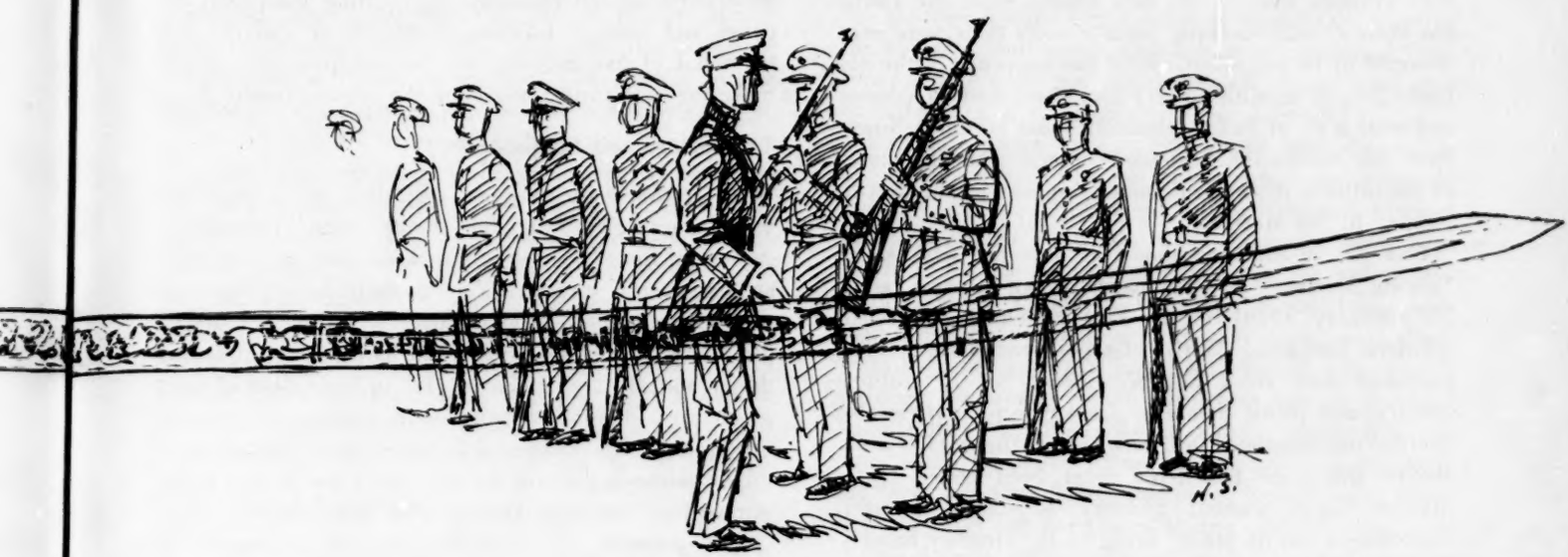
(This is the third article in what has become an annual Gazette series. Since the demise of the original author, LtCol John Corbin—at one time a regular Gazette contributor—the present writer has undertaken to carry on LtCol Corbin's work of summarizing for record the necrology of Marine Corps traditions which the recent past has seen in decline or outright death.—Editor.)

THE MEASURE OF SURVIVAL OF THE MARINE CORPS as we know it is to a great extent the measure of survival of the essential characteristics in which our Corps *differs* from other military organizations. Put a little differently, the true survival of the Marine Corps itself could well be defined simply as the survival of the Marine Corps way of doing things.

It is the purpose of this article to look backward in an attempt to see how the Marine Corps way of doing things has fared. Have we held to our old ways? Have we evolved new ones? What time-honored usages have lapsed? Wherein have we allowed a tradition to slide, unnoticed, into the chasm of disuse?

The Thin Line of Tradition—III

By LtCol Robert D. Heinl, Jr



Following the pattern evolved (rather hesitantly) in past articles of this title, therefore, let us look over the field to see where (and how) the death-wind has shrivelled honored tradition of our Corps.

Uniform, Equipment, and Clothing . . .

THE OUTWARD and visible, the crowning glory of the marine has been his uniform. It is by his familiar, soldierly blue standing collar; by his severely-tailored greens unmarred by garish brass or hardware; by his immaculacy and knife-edge press; that the individual marine has made himself a marked man in any street or gathering. Despite this tradition, however, we have not been able to stand fast, or even to hold the line at all points in this vital area of Marine custom.

Wearing medals is a long-standing practice which seems to have lapsed. In their inception (before ribbons ever existed) medals were issued to be worn. Foreign armies and navies mainly still hold to this idea, the ribbon being conceived as a most informal short-cut. As late as 1939, it was a matter of ordinary Saturday-inspection routine (particularly aboard ship) that all hands turned out with full medals; but in how many posts today could an inspection-team find the whole command in possession, even, of its medals, let alone able to wear them correctly.

Battle-clasps, like full medals, seem also on the verge of extinction. During all past combat operations, the so-called battle-star was evidence (1) of combat participation, and (2) of possession by the wearer of a clasp, or appropriately-engraved bar worn on the suspension-ribbon of the medal itself. For the World War I Victory Medal, as an example, there were, altogether, some 30 authorized clasps, each of which entitled the possessor to a star on the ribbon. Similarly, as late as the American Defense Service Medal (1939-1941), we find the star denoting authority to wear a clasp. But with the World War II campaign medals, all this has changed. Clasps are no more, and we festoon the suspension ribbons of medals with stars rather than the clasps which could tell such vivid stories. Likewise, it seems, the star itself no longer necessarily denotes combat or assimilated activity. Nowadays, you get stars for multiple Good Conduct Medals (rather than the bronze numerals of earlier times); for well-behaved longevity in the Reserve; for

having been in China in the Good Old Days (second award of China Service Medal). In fact the star has become so meaningless that, for extraordinary types of combat distinction, we have turned to letters (Bronze "A" or "V"; Silver "W"), while the star, like the clasp itself, loses meaning.

Brass buttons on dress uniforms, both officer and enlisted, have lately undergone a magical (post-war) transmutation to gold. That is probably quite convenient. Gold buttons require no shine, no jeweler's rouge, and no button-board. *Ergo,* nobody ever has to shine his buttons; *ergo,* most Marine officers and men go around with crummy buttons on their blues; *ergo,* the Corps has more crummy-looking blues-wearers than were ever dreamed of 10 years ago. What has happened to the old Basic School in which every lieutenant had to possess and wear a set of buffed, gleaming *brass* buttons? Nowadays, few except the lieutenant-colonels (the lieutenants of the thirties, it should be noted) appear in public with buttons fit for Marines.

Gun oil, at one time almost as universal a necessity (among Marines) as toilet paper, is not stocked (as of 10 February 1949) in the Post Exchange[1] of Headquarters Battalion, Marine Corps Headquarters. The exchange does stock panties, Chanel No. 5, costume jewelry, and picnic hampers. *Copenhagen Snuff* is also overdue and presumed lost, even though the sales of milkshakes and pogey-bait have never been better. In a Marine Corps without gunnery sergeants, however, Copenhagen has no place. Bring on the Hershey bars!

The 1832 evening dress, replete with its gold (and with its elaborately traditional sleeve-devices of rank—the last Marine Corps uniform on which those century-old devices survived) has fallen under the relentless hammer of uniformity. Although—and all credit to those who salvaged something from the wreckage—we will still retain, under title of "Mess Dress," a chastened version of the fine old jacket, a virtually identical officers' evening dress now obtains in all the Services. This civilian-styled monstrosity of dance-band cut will ultimately displace thousands of costly, colorful and distinctive evening dress uniforms among all Services, erasing proud traditions (such as our own) which are more than a hundred years old. Moreover, you will have to cock a mighty sharp eye, at a big social function, to tell the difference between an Air Force colonel and a Navy captain. But it will make for uniformity. And who ever bothered about what those mixed-up old Marine sleeve-devices meant, anyhow?

Narrow-width (⅜-inch) ribbons, destined, in a year or so to replace the ½-inch ribbons worn throughout the Naval Service (and by lots of soldiers and airmen as well), seem to be another propitiatory offering to the sacred cow, Uniformity. It has been a long-standing, prescribed tradition that Navy, Coast Guard, and Marine ribbons are of the broad width. The net effect of substituting narrow ones—aside from smothered disgruntlement among the die-hards (like my late friend, LtCol Corbin, an arteriosclerotic, if I ever knew one)—will be to force every Navy, Marine, and Coast Guard officer to get rid of his present ribbon-bars, while many an Army and Air Force officer will have to deep-six his non-reg, but preferred wide-size bars. All this will produce anything but economy, aggregating individual expense and wastage totalling thousands of dollars; and three out of five Services will be unhappy. But it will make for uniformity; and hang the passing tradition.

Terminology and Language . . .

"THERE IS no group of specialists worth their salt who do not develop an *argot* of their own," remarked a student of institutions. From tobacco-auctioneers to physicians, men's speech has been their badge, even of nativity and social status, let alone of calling. Similarly, the Marine Corps has always had its own way of saying things and of naming things. Yet in these days of joint procedures, standard terminologies, and mass communication, the alert listener will notice many deviations—minor, perhaps, but still deviant—from the Marine Corps phraseology we have known. For example—

The practice of addressing second lieutenants as "Mister," although still on the books, is seemingly near extinction. Time was, as late as 1941, that the customary distinction, in address, between first and second lieutenants was that you spoke of Lieutenant Silverbar, but *Mister* Goldbar. In all probability the change from that usage is only a by-product of the present tendency to lump all lieutenants in one mass, just as, in the same way, we have (effectively speaking) demoted the private first class from lance-corporal status to superior-private status. It is well within the memory of living officers, however, that first lieutenants expected and exacted a salute and a "sir" from the younger lieutenants whom they bespoke as "Mister." Nowadays, it appears, first lieutenant is just a pay-period.

The field hat has not only been erased from the Uniform Regulations but even from our vocabulary—at least if we pay any attention to the pronunciamentos of Marine Corps Headquarters on the subject of rifle competitions, wherein—by the bones of Archibald Henderson—it is stated that "*campaign* hats" (italics mine) are permissible headgear for shooters. Considering the hidebound, conservative nature of Old Team Shots, I wonder what some of them thought last year as they donned their *campaign* hats?

In Aviation parlance, the *fighting squadron* is facing

[1] The writer is well aware that oil can be obtained from the QM; *but,* it is nevertheless a non-traditional exchange which would not stock some special line of old shooters' oil, and other riflemen's pharmacopeia.

conversational displacement by the fighter squadron. That distinctive Navy-Marine "ing" on "fighting" and "scout-bombing" in the official titles of our squadrons goes back a long while, as any veterans of Fighting One or Bombing Two will tell you; but incursion of RAF and AAF lingo into our own Aviation speaking and thinking is chipping away at the Navy-Marine way of talking about flight.

"That's well," a substantial old Marine Corps phrase connoting anything from admonition to satisfaction, is seldom heard of late. Let us hope it is not sinking into the limbo which seems to have smothered "By your leave, sir," and may yet do in "Aye, aye, sir."

Marine Corps battle standards (in the interest of uniform terminology, we understand) are shortly to be redesignated as "flags, regimental." The change in title will not put any more pennies into the taxpayer's pocket, but it will alter a fine-sounding, distinctive Marine name for a cherished unit symbol. As any student of semantics will tell you, when people begin to fiddle with the nomenclature of tradition, they are coming perilously close to tampering with the tradition itself. The next step could well be (for example) to standardize the specifications, then the materials, then the coloring, then the inscribing —and pretty soon, what we are proud to speak of as a Marine Corps battle standard, will have been standardized into something indistinguishable from any other unit banner (or flag, regimental) in the Armed Services.

Etiquette and Ritual . . .

THE ETIQUETTE and ritual of an elite Corps is precise, well-established, and altogether a matter of much tradition. This has certainly been the case as far as the Marine Corps is concerned, in matters both official and social. World War II, however, like most wars,[2] has been no respector of such niceties, and it would appear that we have drifted far from some Marine Corps folkways which in 1939 seemed as fixed as the laws of the Medes and Persians.

An officer's personal credit, if we are to draw conclusions from the rulings and procedures of clubs, banks, ship's service stores, and even some post exchanges, is no longer what it once was. The all but universal demise of the hallowed chit system in Navy and Marine Corps messes would indicate that the signature of a commissioned officer isn't even good for a short beer. Most Marine officers can remember when a savor of imposition, if not of insult, attached to any officers' mess or club which refused to grant the automatic privilege of chit-signing to any transient (let alone permanent resident). Nowadays—except in the nonpareil Mess at Quantico, and a very few other hideouts of honor—your signature on a chit is worth about what it would be worth in lieu of hard-cash collateral in a police station. Cash on the barrel-head, or little pay-in-advance ticket-books, have become the approved way of doing things, just as, in the same locales, an officer must face everything short of provost-marshal shakedown or FBI investigation before he can cash a $15.00 personal check. Both situations are an evident result of two major causes: wartime bigness and transiency, and overflow into the Marine Corps (from other Services) of a meaner outlook on the subject. But it hardly seems an excuse for questioning the credit and good faith of 99 officers that the one-hundredth personal check or chit turns out to be made of neoprene. Why not revert to the old-time Marine Corps habit of relentlessly lowering the boom on individuals who debase our personal "currency," and treat the remaining officers as gentlemen of solvency and rudimentary personal honor? [3]

Perhaps unwept, but by no means unwholesome, is the old-time ritual of *formal calling,* which seems largely gone by default. We have all sweated through some of those 20-minute fortnights when it would have been better if everyone concerned had stood in bed; *but*—formal calling forced us to scrape acquaintance with new shipmates and with seniors, and it provided somewhat the same type of hurdle, in a social sense, that a required ten-minute speech throws at you in a school curriculum. Moreover, like all rituals, the formal call emphasized the tribal nature of our group, particularly the very old-time blues-and-sword formal call, which probably has not been seen in the past 10 years. Of course formal calling was an anchor around people's neck. It meant that you had to be presentably dressed during calling-hours, and it meant that you had to take time away from the garden, or washing the car, or that work-bench in the basement. It also meant that you had to submit to a good deal of boredom and canned small talk. On the other hand, there was a crude, conscientious merit to the system, and for the sake of that alone, we may well mourn its desuetude.

Wearing side-arms when first reporting is another war casualty. The root of this age-old tradition lay in its symbolization of the fact that the officer reporting, caparisoned with sword, was fully armed and ready, on the spot, for any duty. This was a part of the now moribund ritual of the sword, which will not be restored until we again think of the officer's sword as a symbol of command, and prescribe its being carried on other occasions than full-blues parades. By contrast, nowadays, a reporting officer strolls in (like as not, in civilian clothes),

[2] One thinks immediately of the 1917 plaint of the old Regular Army man: "War sure plays hell with the Army." He was right.

[3] In fairness to the Post Exchange system, it should be emphasized that the old-time standard $25.00 check-cashing privilege still stands unshaken on the books, regardless of what other exchange services or ship's service organizations do about it. In fact, a Marine Corps Exchange is one of the few places in the Service where an officer can obtain cash in unquestioning exchange for his signature.

has a cup of coffee with the exec, meets the colonel in a perfunctory way, and strolls out—which doesn't sound much like John Thomason's Marine Corps.

Administration . . .

MARINE CORPS ADMINISTRATION continues to be shaken up, rent by internal convulsions, and is, in fact, an area of folkways about as quiet and stable as the mean center of a large ammunition depot in process of explosion. Because of the variety of reasons for these innumerable administrative changes, most of which break almost revulsively with tradition, it is hard to generalize blandly that any or all are for net good or for net bad. Some spring from a profound drive toward efficient self-improvement (such as the cabal to substitute IBM machines for civil servants in the Muster Roll Section; regardless of a break with traditions sacred since the days of Samuel Nicholas, it is undeniable that an IBM machine need not quit on the 1630 buzzer, and tends to gossip a good deal less than a CAF-3 file-clerk). Other changes, equally abrupt, spring from an unperceptive worship (by Marine administrative zealots), of the grim, behemoth-like personnel machinery of the Pentagon; others yet are imposed upon us in the name of "inter-Service uniformity," a phrase which marines will be hearing more and more, I predict. Thus, one's selection of dead or dying Marine administrative traditions—in the year which will see even a new Marine Corps Manual, God save the mark!—could be endless. I have listed only a few, and for particular reasons as stated in each case.

Marine Corps letterhead stationery, crowned proudly with our globe and anchor and our "Semper Fidelis," is no more. To a good many, this departure seems almost as if one of our battle standards had fallen before the enemy. The iron-heeled march of progress has substituted a uniform National Military Establishment letterhead. I wonder how many of us have been tempted to stash away a ream of the old-time letterhead, for personal/official correspondence—and for old sake's sake? What savings will result from changing the dies, reengraving the headings, and using the old stock for scratchpads, one is not qualified to say; but tradition has again given way to uniformity.

The nomenclature of routine orders has been centrifuged far away from any familiar titles during the past year, what with the death (without tears in many quarters) of the Letter of Instruction, which now joins the Headquarters Bulletin (dating from 1925), the Circular Letter, and the Marine Corps Order, in oblivion. It is doubtless true that the barnacles of illogic had come to encrust our system of routine orders. But why couldn't we shake up the substance, and let the nomenclature alone? It would appear just as easy to define accurately what should be said or promulgated in a *Marine Corps Order* as to do the same thing, and then call the end-product, Army-style, a *General Order*. To administrative zealots, this may look like a distinction without a difference, but a student of semantics might give him an argument.

The Officer of the Day, a traditional figure enveloped in precedent and prerogative, is increasingly being replaced by a functionary whom we entitle the Duty Officer. For some reason, it appears to be felt that no place but a Marine Barracks (and not always there) should have an OD, named outright as such. Similarly, the woods are full of Duty NCOs, but a plain-out Sergeant (or Corporal) of the Guard seems to be a relative rarity. By the same token, where at one time commanding officers could sleep sound once the Officer of the Day had been posted, there seems to be an increase of supervisory watch officers—usually styled Staff Duty Officers—with a net effect that many Officers of the Day are little more, in scope of function and authority, than Commanders of the Guard.

The adjutant has, in later years, entirely changed his status, as well as many of his duties. Until the war, the adjutant of any unit short of brigade size was a kind of assistant executive officer, a person of prestige and puissance who enjoyed the confidences of the commander. Moreover, the duty itself was rotated—frequently for instructional purposes—among the various officers of company-commander level in the units. This of course was a unique opportunity for the general run of company officers to learn administration, something of staff functioning, and most of all, to observe the way their seniors operated on the very level to which they themselves would next graduate. But all this has gone out the window. The adjutant, even of a battalion, is now an administrative Brahmin, stabilized in the specialty, and normally a graduate sergeant-major. He can probably keep up with the paperwork a little better, but the luster and prestige of the job has dissipated—and very few company officers have any idea as to what goes on inside a battalion headquarters except at Office Hours.

Discipline . . .

THE DISCIPLINARY PROCESSES and rigors of the Marine Corps lie close to the heart of our traditions. In the asceticism, the totality, and the self-demanding quality of Marine Corps discipline may be found many great secrets of the Corps. However iron-bound and apart these traditions may seem, they too, nevertheless, are undergoing change.

The Marine Corps Good Conduct Medal presents an excellent starting-point. In 1939, one decade ago, the standards for award of this prized medal (summarized from Article 8-43, Marine Corps Manual) were as follows:

> Four years' unbroken service (except in the cases of enlisted men discharged to accept commissioned or warrant rank); average markings throughout enlistment of 4.8 in obedience and sobriety (4.6 allowed on first enlistments only); similar averages of 4.0 in military efficiency, neatness and military bearing; no convictions by court-martial; and *only* if recommended by commanding officer.

It was intentionally hard to win. But many marines won it. During the war, other services adopted the idea, but with infinitely lowered standards of award. Next the issue was raised (by the copyists) that the Marine Corps standards were "out of line." The obvious result: a compromise and a resultant cheapening of the Marine Corps award. The 1949 criteria for issue of a Good Conduct Medal speak for themselves they are:

> Any consecutive three years' service (including gaps of up to 90 days incident to reenlistment); service record markings in neatness, sobriety, military efficiency, obedience, and military bearing *not* to be considered in making this award; not more than two commanding officer's punishments; and award to be made to all men meeting these standards *unless* commanding officer can support a contrary recommendation.

A virtuous tradition has been debased just to make another ribbon easier to get—and Marine Corps quality is the loser.

Field officers no longer draw the water, as a group, that they once did. Whereas, not too long past, all field officers, from major through colonel, formed a solid array, formidable as a herd of dinosaur, there now runs an undeniable cleavage between the grade of major and the balance of field grades, a separation no doubt related to the Navy's "command rank" demarcation at the rank of commander. When compared to what a major used to be—the major as was a major, of a decade ago—the relative youth and diminution of service experience in this rank perhaps goes far to account for the situation. This is not helped, however, by treating majors as graduate company officers, or by creating a number of so-called "companies" in our T/O, commanded by majors. If our very young field officers are to grow up, they must be treated as if they were grown, and as if they were indeed the lawful inheritors of the beef-eating, fire-eating, aldermanic majors of the past.

Basic indoctrination of lieutenants, judged at least on output, seems much relaxed compared to the traditional "spiritual training"—to borrow a Japanese phrase—formerly practiced at Philadelphia. It may well be that the necessity for much greater technical training at Basic School somewhat constricts the amount of drill and command and associated Marine-molding instruction. On the other hands, the Corps should never forget that, *au fond*, Basic School—like boot camp, is essentially not a military science college for young men, but *a school of attitude*. It will always be easy for young officers to pick up the techniques, but the time and the place—really, the only time and the only place—for making marines out of our fledgling officers, is Basic School. That this was well understood in the Philadelphia Basic School, most of its graduates will emphatically attest. One hopes that Quantico, now that both war and demobilization are past, will regain the full rigor and vigor traditional to the basic training of Marine officers.

The marriage of enlisted marines (below staff NCO grades) was, until World War II, almost unheard of. Not only did still-existing restrictions on reenlistment, and on quarters and transportation of dependents, render marriage a hard path for those below platoon sergeant but the then prevailing attitude of the entire Corps frowned upon the practice to such an extent that a married corporal, say, was automatically a problem corporal—and probably a substandard corporal, just like such a one as drank too much or indulged other vices inordinately. The broad effects of this misogynist tradition were two fold—and beneficial: (1) with bachelor (though by no means celibate) rank and file, the Corps retained high flexibility, and attracted to it the type of military ascetic to whom a professionally soldiering organization was home; (2) the wholly desirable, traditional separation of staff NCOs from the balance of enlisted personnel, was much enhanced by the domestic privileges of the first three pay-grades.

PARALLEL to the foregoing change in marital condition of the Corps, is that which permits the *marriages of second lieutenants* with less than two years' service. It was held—and wisely—before 1942, that, during the initial years of a young officer's career, he should not be preoccupied with a family, that the business of learning the Marine Corps was a full-time job. Likewise, the simple economic factors of cost-of-living versus pay and allowances of the first pay-period is apt to hand an anchor around an officer's neck. In spite of all this, nevertheless, both second lieutenants and PFCs marry away—and the Corps, in many cases, as a result, gets their services on little more than part-time.

Although some years dead, the old Marine Corps system of *specialist ratings* had much to commend it. The concept of this, in a nutshell, was that possession, even of very high skill in some specialty or technique, did not necessarily fit a marine to be a noncommissioned officer (who was then visualized primarily as a leader of other marines). Therefore, to compensate talented specialists (such as good artisans or recreation assistants, etc.) without watering down the fire and caliber of the noncommissioned officer corps, a scale of additional monetary payments (known as "specialist ratings") was in force for such as qualified. These latter received pay commensurate with their special contributions and abilities, but did not hold rank except on the entirely dif-

ferent basis of their capacity to lead. Like a number of other aspects of our NCO traditions, however, specialist ratings died, and now a sleek, clerkly exchange steward or a post maintenance man can wear the chevrons once reserved for gunnery sergeants.

Haircuts. In the completely unwept old Marine Corps Manual, that curiosity shop of administration and admonition, Article 1-26 reads as follows:

> "Enlisted men will, at all times, wear their hair neatly and closely trimmed. The hair may be clipped at the edges of the sides and back, but must be so trimmed as to present an evenly graduated appearance, and must not be over two inches in length. The back of the neck must not be shaved."

In the new Manual, one hears, this wording has carried over *except* for a one-word alteration: for the old "two," we now find "three." In other words, the Broadway chorus-boys' "Haircut that does not look like a haircut" has been adopted by the Marine Corps. No doubt the new three-inch coiffure represents a projection of the female influence which appears to overspread the nation, and has now even twined its fingers through the traditional haircut of marines.

IN HIS PAST WRITINGS on this topic, my predecessor Corbin, very properly laid his sights on unthinking marines who, as individuals, permitted the Marine Corps way of doing things to go by the board. These individuals, whether as easy-going defaulters or as shortcut administrators, LtCol Corbin pointed out, permitted Marine Corps traditions to die through disuse, or, much worse, killed them with "What does it matter anyway?"

Much the more dangerous present enemy of the Marine Corps way of doing things, however, is the jet-propelled trend toward inter-Service uniformity—without special regard to the value or efficiency to be gained therefrom. As of 1949, in fact, it appears that simple lack of uniformity, as between Services—of uniformity in itself, *per se*—has been elevated to an eighth pedestal beside Gluttony, Lust, Pride, Covetousness, Anger, Sloth, and Envy.

Out of 25 long-standing, meritorious Marine traditions enumerated in this article, at least seven (30 per cent) have been lined up for execution *only* because such and such a traditional Marine way failed to conform to some other Service's way. Questions of economy or relative efficiency, seemingly, were not invoked. Simple proof of failure to conform, it appears, or failure to be uniform, were enough to support the indictment, sustain the sentence, and carry out the death-warrant.

Despite the fact that England now possesses a highly successful Imperial Defense unification scheme, there is probably no other nation in the world which puts such a premium upon intentional, individual differences between the components of its armed services. Every regiment (let alone every service) points with fierce pride to its unique differences from every other regiment. The Royal Welch Fusilier wears his "flash"; the Coldstream Guardsman has his buttons separated by twos; the Highlander swishes kilts (differing of course from Scots regiment to Scots regiment); and the Royal Navy —why, that revered "Senior Service" would consider it an affront to be likened to anything else in the created world .

Getting back across the Atlantic again, the U. S. Marine Corps is an example of a vitally individualistic service which is esteemed throughout the United States as a National *elite* corps—largely because of the things that make it different. By our uniforms, by our lingo, by our emblem and motto, by our Congressionally-recognized amphibious role, by our distinctive organization and discipline—by these fruits is the Marine Corps known, and because of these very traditions the Corps welds the loyalty of its members.

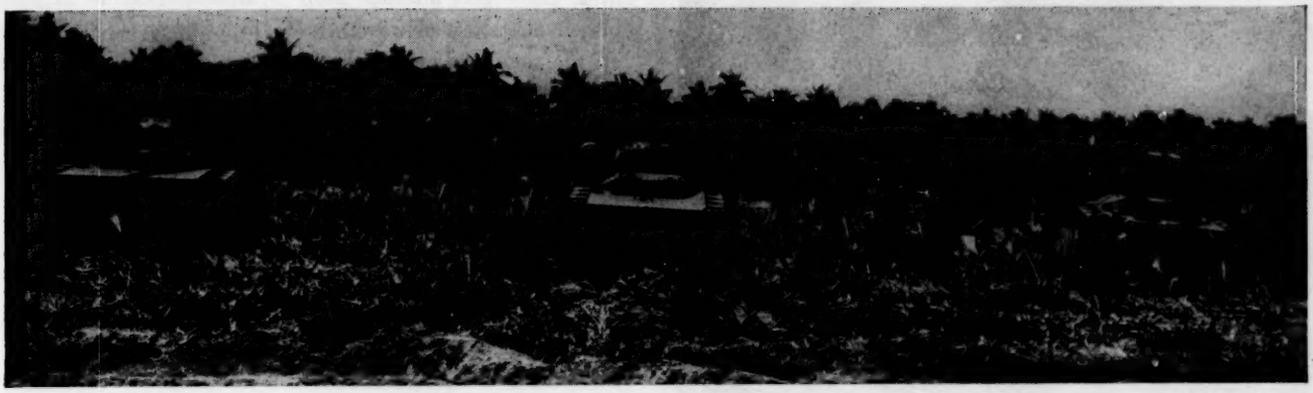
WHEN YOU get down to it, in fact, the traditional differences between the U. S. armed services are the very pegs upon which the individual member of each can hang his respective loyalties. These differences and traditions are the reasons why an airman enlists enthusiastically for duty in a carrier or a jet fighter, why a seaman heads for blue water, and why the Marine Corps has no difficulties in keeping its ranks filled with volunteers. Submerge these salty, traditional individualities into a slab-faced, anonymous uniformity with no end beyond its own nose, and you will kill off three-quarters of the voluntary recruits and long-service careerists in the Armed Forces.

Going broadly into the matter, it may well be argued that the areas in which valid Marine traditions are stifled constitute the soft spots in the armor of the Marine Corps, and that, as our institutions, our traditions, and even our eccentricities—like live coral—develop and toughen, so the Corps itself develops and toughens.

On this basis, we have good reason to fear that 1949's crusade for uniformity may operate like a well-saturated chloroform towel over the Marine Corps face, lulling us as it masks our recognizable identity. To that threat, however, there exists an answer, provided by none other than the late King of England, George V.

During World War I (as a much-detested temporary measure), the Royal Welch Fusiliers were forbidden to wear the traditional "flash," a short streamer traditionally displayed on the collar of their uniform since 1805. Coming, during an inspection of the Regiment, upon an obdurate Fusilier still proudly displaying the prohibited "flash," the King smiled at the soldier, looked him in the eye, and enjoined: "Don't ever let them take it away from you!"

What about it, marines? USMC



Ammo being passed to amtanks in Philippines. LVT(A)s provided immediate tank support for infantry.

The Army and the LVT(A)

By LtCol John T. Collier, Cav-USA

SINCE MANY ARMY DIVISIONS MUST MAKE ASSAULT landings on hostile defended beaches, soldiers as well as marines have wrestled with the problem of providing close supporting fires to the infantryman who has gained a foothold on an enemy held shore. In view of the vigorous treatment of this problem in articles by LtCol A. J. Stuart and Maj E. J. Rowse in the August and December issues of the GAZETTE, respectively, an examination of the Army's experience and doctrine in this field may be of timely interest.

Experience has taught us that no matter how much explosive our planes and ships place on enemy defenses in the landing area, and no matter how long the preparation, our infantryman still has to fight when he gets ashore. We know, too, that he is subject to early counterattack supported by artillery and tanks. To throw him into this fight without the *immediate* close support of heavy weapons is to withhold from him all the means demanded by his mission, and deny to him the protection required for his efficient functioning.

True, our ground soldier on the beach is supported by tactical air and naval gunfire. But in speaking of close support, "close" is a relative term. Neither bombs nor naval shells—vital as they are to any future operation—will be employed against the enemy troops who are drawing a figurative bead on our assault infantryman from a position near the perimeter of the beachhead.

It is these hostile troops who are the main concern of our newly landed soldier. It is they who have the artillery and tanks. It is they who can do him the most damage—*now*. Against them he needs more than his infantry weapons. The amphibious soldier needs immediately available supporting fire which he himself can place exactly *where* he wants it, *when* he wants it. He needs supporting weapons effective against hostile armor and enemy positions which can be taken under direct fire. In short, he needs field artillery and tanks.

The Army's means of providing for these requirements have developed by accelerated evolution rather than by revolution. In Army terminology, the LVT(A) is still an "amphibious tank," and this designation suggests a method of employment. When Army troops first manned "amtanks" in combat, these LVT(A)s were employed exclusively as sea-going tanks. The table of organization for these units was simply a slightly modified T/O for a land tank battalion. Ashore the assault infantryman had immediate tank support to the extent that it could be provided by the equipment. When their land tank tasks were completed, the Army amtankers fulfilled beach defense and similar security missions.

Such early amtank employment was effective—against an enemy weak in armor and direct fire heavy weapons. The LVT(A), with its high silhouette, limited land mobility, and thin skin is not a tank. The Army crews who fought them were men who were equally at home in regular land tanks—and they fully appreciated this fact. Besides depending upon enemy weak-

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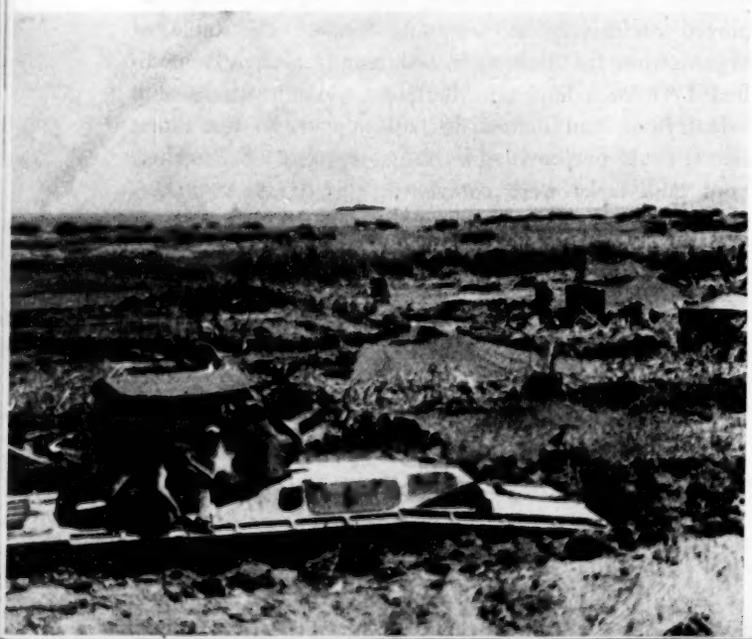
LtCol John T. Collier commanded a battalion of "amtanks" during World War II and recently worked on the preparation of an Army field manual covering their use.

The U. S. Army regards the amphibian tractor as an amphibious tank, also uses them as artillery.

ABOVE: Amtanks get ready for indirect firing. BELOW: 75 mm LTV(A) offers artillery support at Okinawa.



ness, there was another fault with this doctrine of employment. It was wasteful of shipping space to bring all the men and materiel of an amtank battalion on an operation to use it profitably for so short a time—and then put it on beach defense. Replacement of the 37mm gun by a 75mm howitzer as the amtank's principal armament imparted to it a much wider field of employment.

However, the mere arming of amphibious tankers with the 75mm howitzer does not in itself render them capable of artillery support. There may be a great difference between *artillery* fire, and indirect fire such as that delivered on occasion by tanks over friendly troops. That difference lies in the *control and observation* which characterizes the fire of field artillery.

What was theoretically possible became a reality when, in July of 1944, the Army's 776th Amphibian Tank Battalion received its first LVT(A)4s in Hawaii. This versatile body of troops, which parlayed itself into the equivalent of an artillery regiment and established the pattern for all Army amtank operations, had been waiting a long time to get into the war. Just two years earlier, as part of the historic 2d U.S. Cavalry, many of its officers and men had participated in the regiment's last mounted review in a Southwestern desert. Converted to armor, they were skilled tankers before they took to the water in LVT(A)s.

The 776th was teamed up with the battle-wise and artillery-conscious 7th Infantry Division when the idea of real amphibious artillery was first put into effect. It meant changing the whole character of the unit in a short time, and it was a big job. Tables of organization and equipment and prescribed tactical doctrine do not keep pace with the improvisations of combat, and of the latter only those that work endure. The unit wrote its own book, so to speak; liberties were taken with the T/O, and the necessary communications and fire control equipment were obtained outside of normal allowances. Long after this was an accomplished fact—in January 1945—the War Department made it "legal."

AFTER REORGANIZATION, the 776th bore a close resemblance to the division artillery. It had the same number of guns—forty-eight—in 12 platoons (batteries) of four each. Fire direction centers were established in each of the four (company) headquarters which controlled three platoons. Observation and liaison with the infantry were provided by the field artillery personnel normally with the supported troops.

In addition to rehearsing the beach assault, an LVT(A) unit which is to provide artillery support should train with the forward observers and liaison officers who will control its fires. Fortunately, the nature of amphibious operations makes possible adequate rehearsals of the critical initial phase. This artillery-amtank practice was a part of the preparation of the 7th

Division and 776th Amphibian Tank Battalion—and it paid off in combat.

Endowing the amphibious tank battalion with the capability to deliver artillery fire does not enhance its ability to function as a tank unit ashore. Neither does it materially reduce this ability. Regarding the need for early tank support on a beachhead, the Army has reached the conclusions expressed in LtCol Stuart's article: *land* tanks "must be landed in strength with the assault," and "there are really no insurmountable difficulties preventing the landing of tanks in the first assault waves." However, in addition to firing on the landing beaches from the water during the movement, amphibious tanks will operate as land tanks by clearing the beaches of hostile small arms and observed indirect fire. As soon as the supported infantry passes inland of the amphibious tanks, the latter cease direct fire and assume the role of field artillery. By pinch hitting for the organic field artillery, the amphibious tank battalion provides the assault infantryman with immediate *controlled* fire, massed for maximum effect, *when* and *where* he needs it. By reinforcing the organic artillery after the latter is ashore, the battalion greatly increases the quantity of artillery support available to the infantry.

THIS TYPE of *combined arms* amphibious assault was given its first trial in the Leyte landing on 20 October 1944. Nearly 1,000 rounds of HE were placed on the beaches by the LVT(A)s as they made the water approach. When they hit the beaches at 1003 Hours they were met with mortar fire and small arms fire from suicide units. This opposition was overcome with very few casualities among amtank or supported infantry troops, and by 1016 Hours the battalion was in battery position 200 yards inland. Meanwhile, medium tanks were landed by LCMs in the fifth wave. The infantry battalions in the assault advanced against considerable machine gun, antitank, and rifle fire, and the LVT(A) artillery placed concentrations on these targets beginning well within the first hour of the landing. Shortly before daylight of A plus 1 the amtanks reinforced the division artillery in firing upon counterattacking enemy troops. The unit supported the advance from the landing beaches until A plus 3. Subsequently elements of the battalion moved by water under their own power for more than a hundred miles to the west coast of Leyte, where they saw more action both as artillery and as tanks.

Amtank artillery techniques were put to further tests in the Ormoc landing made by the 77th Division, and subsequent amphibious operations against Palompon, Leyte, and the Camotes Islands. Palompon marked the first use of LVT(A)s as the *only* artillery with the assault forces, and the first time amphibious tanks made a lengthy shore-to-shore operation under their own power. Accompanying amphibious tractors lifting a heavily reinforced infantry battalion, the amtanks "swam" 40 miles from dusk to dawn to bombard the landing beaches and comprise the task force artillery. In a similar operation against the Camotes Islands off Leyte, resistance from fortified positions was stubborn. A great deal of time fire was delivered, and air spotting was used extensively.

All Army amphibious tank battalions in the theatre had been trained and equipped to deliver artillery fire when the time had come to mount the offensive against the Ryukyu Islands. As a result of the Philippine experience many refinements had been made. In each company headquarters an LVT(A) had been modified so that it could serve as a fire direction center. The command post of the battalion was mounted in three LVTs instead of in amphibious tanks. Two of these were equipped with blackout cover, electric lights, telephones, and folding tables and chairs. Each carried a jeep ashore: one was for the commander, and the other was for the executive officer. If either were knocked out, the unit would still have a CP capable of controlling its operations. Ashore these two vehicles were placed end to end in defiladed positions, and formed an adequate CP for round the clock operation. The third LVT was a communications vehicle and message center. It had a built-in switchboard, and sufficient radios to monitor all nets. Two wire laying vehicles were added to increase the efficiency of the wire section. At Okinawa the 776th Amphibious Tank Battalion was employed ashore throughout the operation as a provisional regiment of artillery, usually in reinforcement of organic artillery. It delivered concentrations totalling 41,297 rounds, and once fired a preparation of 6,000 rounds in 90 minutes.

PRESENT ARMY doctrine for the employment of the amphibious tank battalion, now in process of publication in Field Manual 17-34, reflects the extensive experience gained with amtank artillery by the 7th, 77th, and 96th Infantry Divisions during the war in the Pacific. The amphibious tank battalion is a specialized armored assault force under corps control. It is attached to divisions for specific amphibious operations, and performs its artillery missions under the control of the division artillery. Normally it is placed in support of infantry units rather than attached to them.

The amphibious tank battalion is capable of maintaining fire from the water on beach areas after the lifting of naval gunfire, clearing landing areas by means of direct fire, and serving as interim artillery until the organic artillery can land and take over. Thereafter it is available to reinforce division or corps artillery.

Even though we get land tanks ashore with the assault infantry, the flexibility and versatility of the amphibious tanks have saved them from the scrap heap of obsolescence. USMC

Fire Support Coordination in Base Defense

By Maj John J. Wade, Jr

CONSIDERABLE SPACE IN THE GAZETTE HAS BEEN DEVOTED to the discussion of fire support coordination in the realm of amphibious operations, to the almost complete exclusion of the application of coordination to the defense of advanced naval bases. The traditional two-fold mission of the Marine Corps, as restated in the National Security Act of 1947, embraces the provision of "Fleet Marine Forces of combined arms, together with supporting air components, for service with the fleet in the seizure *and defense* of advanced naval bases. . . ."

The experience of Fleet Marine Force units in amphibious operations throughout World War II led to the inevitable evolution of the fire support coordination center (FSCC) as a means of insuring the most effective support for assault elements in contact with hostile forces. Inclusion of the FSCC in recent tables of organization for major artillery echelons is recognition of a long felt need.

Doctrine provides that the artillery commander execute an additional function as fire support coordinator. The scope of his authority is defined by his commander, normally being that which is necessary to resolve conflicts among representatives of the three major supporting arms, artillery, naval gunfire, and close support aviation. Coordination must be continuous during planning and execution, to ensure the most effective employment of each arm, as well as to obviate wasteful duplication of effort.

As organized for future amphibious operations, the FSCC consists of two major components, the fire support coordination section, and the target information section. The former is characterized by the physical presence of the artillery, gunfire, and air officers. The target information section is a specialized intelligence agency catering to the demands of the three supporting arms representatives. As may be surmised, the FSCC constitutes a communication center of major proportions, tapping all appropriate intelligence sources, and linking the massive individual nets of artillery, naval fire support agencies, and aviation.

The need for coordination of supporting arms in an amphibious operation is above question. Does that same need for coordination among the various supporting arms exist in the defense of an advanced naval base?

The amphibious force enjoys certain advantages denied to a base defense force. The rigid limitation of means available to the static base defender renders mandatory the most efficient employment of all arms and services which may be included in the task organization. Some agency must be established for the coordination of the fires of those supporting arms available to the base commander.

The responsibilities of the base commander may be far more numerous than those of the landing force commander. In addition to the conduct of normal base operations, the base commander must establish defense against air attack, defense against surface attack, and defense against ground attack. In order to accomplish planning, as well as to institute these various defenses, the base commander must delegate to his subordinate commanders certain functions. Ultimate responsibility, however, remains with the base commander, who must approve all tactical plans and, when required, establish priorities of defensive effort.

Among the numerous agencies with which he must deal are found search and intercept aircraft of the air defense command, search facilities of the air warning service, surface vessels of the naval local defense force and the naval operating base, local defense weapons of the antiaircraft command and seacoast artillery command, and the ground defense force.

DURING PLANNING, as well as during the conduct of defensive operations, the base commander must supervise coordination between two or more of the aforementioned subordinate command which share a common primary mission, as between fighter aircraft of his air defense command, and the ground weapons of his antiaircraft artillery command. He must provide for harmonious coordination among all elements which may engage in common secondary missions, as in the case of antiaircraft artillery and seacoast artillery which may simultaneously be ordered to reinforce the fires of field artillery against hostile targets ashore.

These multiple functions amount to a considerable

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FSCC can be readily adapted to the requirements of the base command. Its physical equipment constitutes a nerve center second to none in the landing force, one easily capable of linking various supporting arms involved in base defense

task in planning the defense of an advanced base. There is little cause to doubt that control and coordination of the various subordinate arms would assume the proportions of a colossus at the height of defensive operations against a balanced enemy force of combined arms in possession of superiority in the air and on the sea.

BY CONTRAST to the situation of this base commander, the landing force commander in an amphibious operation faces only a minor problem. His normal combat strength will be several times that of the defender. His prerequisites for attack include air superiority and naval superiority, at least in a local, if not in a general sense. Regardless of these factors which tend to tip the scale in his favor, the landing force commander yet requires a fire support coordination center to execute certain delegated functions, thereby assuring himself of optimum fire support, as well as of greater freedom to concentrate on tactical matters outside the realm of fire support.

The base commander is hamstrung in comparison. He has far greater need of an agency to coordinate his relatively limited supporting power. Initiative and decision lying almost exclusively with the attacker, the defender must rely on flexibility, which attribute implies painstaking coordination in planning, together with instantaneous execution after the commencement of defensive operations. The base commander, like the landing force commander, must assure cooperation among his various supporting arms through a unified fire support coordination agency.

What would be the logical functions of such an agency? Of prime importance would be the correlation of information and intelligence with respect to hostile targets which would be received from search facilities of the various arms, as well as from higher echelons, as the theater commander. Such collated intelligence should be available to all subordinate arms, whether or not it pertained to hostile targets normal to a given arm.

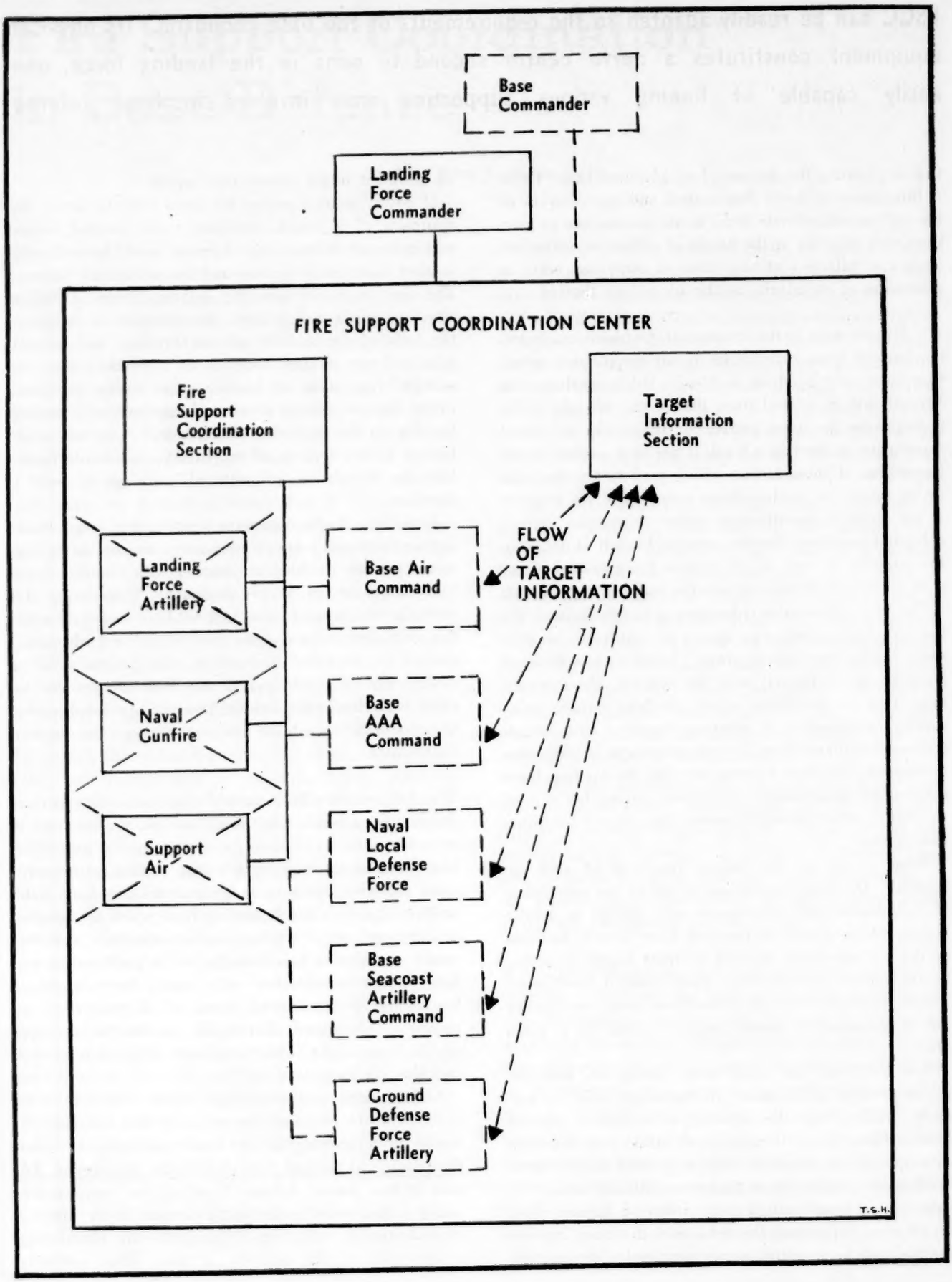
Search by air and local naval forces, for instance, might produce information of immediate value to seacoast artillery due to sighting of a hostile surface bombardment force; to antiaircraft artillery by detection of a squadron of attack aircraft; to ground defense force artillery by picking up an enemy amphibious force. Yet each type of hostile attack may produce a definite effect on all arms supporting the defense of the base, increasing the need for a central agency equipped to disseminate all pertinent target information rapidly.

If patrol aircraft and picket ships were to detect the approach of a sizable airborne force, normal means within the air defense control center would be employed to alert intercepting fighters and the antiaircraft defense. The absence of accompanying seaborne forces in such a situation might well indicate the necessity of orienting the bulk of the mobile seacoast artillery and ground defense force artillery weapons to mass their fires on suitable drop zones or landing zones within the base, rather than on marine avenues of approach and landing beaches on the perimeter of the base. A central intelligence agency serving all supporting arms would facilitate the circulation of required warning in such a situation.

In addition to the foregoing warning and target intelligence functions, a base fire support coordination agency would provide the base commander with requisite flexibility in execution of his decisions. Considering the previous case whereby seacoast artillery and field artillery units were warned of the possibility of a forthcoming change in defensive dispositions, the provision of a central agency would permit the base commander to effect such change through the issuance of a single order to a single individual, the base commander's fire support coordinator.

THE COORDINATION AGENCY would come into its own during the execution by one base defense arm of a secondary mission in reinforcement of another arm. The base commander may direct that certain antiaircraft units reinforce the fires of ground defense force field artillery against a hostile landing force which has secured a lodgment ashore. The base commander's decision would probably be based on the advice proffered by his fire support coordinator, who would have complete knowledge of the current status of all weapons concerned. That coordinator could execute the decision of the commander with minimum delay through his coordination agency.

Certain additional advantages would accrue to such function of the coordination agency in this instance. It would be unnecessary for the base commander to order the passage of tactical control over the reinforcing AA unit to the ground defense force artillery commander, which action would probably be essential in the absence of a central coordinating element, thereby introducing costly delay to the delivery of fire. That authority


Base Commander
Landing Force Commander
FIRE SUPPORT COORDINATION CENTER
Fire Support Coordination Section
Target Information Section
FLOW OF TARGET INFORMATION
Landing Force Artillery
Base Air Command
Naval Gunfire
Base AAA Command
Support Air
Naval Local Defense Force
Base Seacoast Artillery Command
Ground Defense Force Artillery
T.S.H.

delegated by the base commander to his fire support coordinator would allow execution of the secondary mission without delay and with no change in existing tactical control. On the basis of information and warning available to the coordinator, this antiaircraft unit could be directed to resume its normal function in defense against air attacks in accordance with the demands of the situation.

Similar action could be taken by the base fire support coordinator with respect to ground defense force field artillery or antiaircraft artillery executing fires against water-borne targets in reinforcement of seacoast artillery fires; to seacoast artillery reinforcing field artillery fires; as well as to dual-purpose seacoast artillery reinforcing AA fires.

If it be admitted that the base commander has a justifiable need for a fire support coordination agency, from where might it be procured? If his base is defended by a ground defense force composed of Fleet Marine Force units, he will find a tailor-made agency under his command, in the FSCC organic to each division and amphibious corps in the FMF.

Analysis indicates that the FSCC, although popularly associated with the landing force, can be readily adapted to the requirements of the base command. Its physical equipment constitutes a nerve center second to none in the landing force, one easily capable of linking the various supporting arms involved in base defense. The introduction of additional liaison officers would require little alteration except in dimensional terms. The target information section of the FSCC could serve as a filter center for the collection and dissemination of all early warning information received from long range search elements, as well as of close-in data furnished by static surveillance agencies within the base.

THE GROUND DEFENSE force commander might be expected to protest such usurpation of his coordination center. But would his objections be well-founded? When can he expect to take an active part in the defense of the base? Until hostile forces are in actual possession of some landing area within the base, the ground defense force commander must play a predominantly passive role. He may accomplish some redisposition of his forces in accordance with the continuing development of enemy capabilities. Active defense, however, lies within the province of the base commander alone during all pre-H-hour operations.

Thus, until a hostile landing is effected, or until hostile forces close via an overland approach, the ground defense force commander needs no fire support coordination center as we know it today.

If, after a hostile landing, the base commander retains control over all of his organic supporting arms (base air command, naval local defense force, base AAA command, and base seacoast artillery command), the ground defense force commander will develop no need for a coordinating agency. Close support aviation and naval gunfire support, as he has known them in the amphibious operation, will be non-existent.

Other circumstances may alter the case, however. The base commander may elect to pass control over all supporting arms to the ground defense force commander upon the successful execution of a hostile landing, or even when a landing is imminent. In either event, the situation will be nothing short of an emergency.

Without a fire support coordination center in the base command echelon, it will be necessary to issue orders to each supporting arm to pass to the tactical control of the ground defense force commander. Critical time must be lost in execution, particularly if normal difficulties are encountered in establishing new communication channels, detailed prior planning notwithstanding.

THE CARDINAL principle of simplicity appears to offer the logical solution. The base commander could effect the desired shift of all supporting arms to the ground defense force commander during this highly critical period by a single directive passing the fire support coordination center itself to the control of the ground defense force commander. No disconcerting change of status would be apparent to any of the supporting arms. Prior orders could adjust the authority to be delegated by the ground defense force commander to his coordinator in the event it differed from that granted by the base commander. The primary advantages of such a method lie in the provision of continuity of effort.

If a single individual, with revolving hat, holds the posts of base commander as well as of ground defense force commander, even greater justification is apparent for designation of the ground defense force unit's FSCC as the FSCC for the base command. The commander in whom is vested this dual authority must maintain maximum control over all subordinate elements, including supporting arms, throughout defensive operations. A coordinating agency becomes mandatory in view of his multiple duties.

The basic principles and doctrines of fire support coordination were initially conceived to meet the needs of commanders of various landing force echelons, their evolution culminating in practical application during the final offensive stages of World War II. Yet those doctrines must apply to the defense of advanced naval bases as well as to the seizure thereof. They are adequately well-founded and sufficiently flexible to embrace both applications. Component elements of the Fleet Marine Force should be capable of adaptation to base defense, as well as to amphibious assault. The fire support coordination center, as presently conceived, fulfills that requirement.

USMC

Passing in Review

BOOKS OF INTEREST TO MARINE READERS

Strategic Position of U. S. . . .

IF RUSSIA STRIKES—George Fielding Eliot, 252 pages, maps. New York: The Bobbs-Merrill Co., Inc. $2.75.

George Fielding Eliot has again favored the American public with a timely estimate of the military situation confronting it. Eliot will be remembered for his pre-war *The Ramparts We Watch* and *Bombs Bursting in Air* dealing with military problems facing America at that time. More recently his *Hate, Hope, and High Explosives* analyzed the Palestine situation and pretty well called the turn there before the decision was reached.

In his latest effort at popularizing the mysteries of grand strategy he examines the military situation of the United States and her friends *vis a vis* Russia.

He states, in the introduction, that he will not succumb to the temptation to describe a future war in terms of push button fantasy but will confine himself to the use of weapons that exist in usable quantities today. Neither, he says, will he attempt to prove the advocates of air power right or wrong nor that any weapon or means of war is more or less important than any other. This immediately starts him off on a firm basis, at least in the eyes of "balanced force of combined arms" advocates. All of this is very refreshing after the surfeit of puerile bombast in the guise of military analysis which has been foisted on the public since the war by radio commentators, editorialists, columnists, politicians, and even some power-seeking individuals in the armed services.

The author presents a convincing argument that 1949 is a year of decision for Russia. Russia must attack the West in 1949 if she is going to win her political objectives by the use of her superior land power. After 1949 economic recovery and American military aid will have so strengthened the West and Middle East that Russia could be held somewhere short of completely overrunning these areas and our bases therein.

The United States has three years of decision, until 1952, (the date set by most educated guesses for Russia to have the atomic bomb) to decide whether or not to wage a preventive atomic war against the Soviets to forestall a later war of mutual atomic destruction which becomes a possibility after the event represented by the hypothetical date 1952. This is the dilemma which faces America; whether to risk a future Russian atomic attack or to strike now to prevent it but in so doing forsake our traditional policy of peace and nonaggression and have the atomic destruction of Russia on our conscience and possibly the public opinion of the world against us.

Having presented these sobering alternatives, Eliot goes on to consider Russian capabilities for various courses of action during 1949 and between 1949 and 1952. The courses of action are: to seize Western Europe, to seize the Middle East, to attack the United States by a combination of air bombardment from captured Alaskan air bases and fifth column sabotage, and to seize the rest of Asia. The author thoroughly examines Russia's capabilities and thinks that Russia could simultaneously take most of Western Europe and the Middle East in 1949 but not in 1950 as the balance of air and land power will have shifted to favor the democracies by then. An air attack on the U. S. via Alaska is feasible but would be tremendously expensive in air transport and long range bombers, requiring most of that available to Russia the bulk of which would eventually be lost. However, it would pay off as a time buying diversion which would prevent the U. S. from interfering decisively with Russian conquests elsewhere. Both would avoid the Far East, thinks Eliot; Russia to prevent a dispersion of her effort, the U. S. to maintain the East as a source of raw materials.

Eliot goes on to discuss the place of the submarine in Russian strategy. He discounts the threat of new type subs by showing that Russia lacks suitable bases for their use, lacks the technical skill for efficient operations of such a complex weapon, and in 1949 lacks numbers of the new type sub. After 1949 allied progress in anti-sub means is likely to outstrip progress in Russian production of subs.

The author is not adverse to tackling a problem as controversial as whether or not air power could defeat Russia. He believes it could; with the atomic bomb, advanced air bases, and ground and sea forces to seize, hold, and supply these bases. Russian land power would wither from lack of supplies from a bombed out homeland to the point where U. S. and allied land power could defeat it. There would be no V-R day in the author's opinion as there would be no Russian government with which to negotiate but merely local, weak, agrarian, regimes which would be dealt with piecemeal. Little

policing would be necessary due to the atomic devastation of the means to wage modern war. The U. S. would then impose a Pax Americana on the world working toward a world government with one hand and prepared to prevent any aggression with the other. In these final prognostications Eliot seems to be treading on thin ice for the first time in the book. But then he does it interestingly and is operating so far in the future that it is difficult to controvert him.

This book is, in essence, what might be termed an estimate of the situation with supporting facts, arguments, and assumptions. How valid this supporting data is would be difficult for anyone below the Joint Chiefs of Staff or the Central Intelligence Agency to completely and accurately assess. However, in spite of possible inaccuracies it is very plausible and convincing and should present the American people with a realistic appraisal of the strategic position of America in the world today as well as the heavy responsibilities which are ours. While written for popular consumption, its general high caliber recommends it to the professional. **FBN**

Philadelphia Sailor . . .

CAPTAIN DAUNTLESS—William Bell Clark. 317 pages, illustrated. Baton Rouge: Louisiana State University Press. $4.75.

Capt Nicholas Biddle, ranking fifth among the captains of the Continental Navy, is one of the lesser-known revolutionary heroes. At the age of 27, he was well on his way to a firm niche in our history when his ship, the frigate *Randolph*, exploded in battle. Of the entire complement, only four seamen survived.

Biddle went to sea at 14 as a cabin boy, and served as able seaman, mate, and captain before entering the Continental Navy. He had served for a year as a midshipman in the Royal Navy at the time of the Boston Tea Party, when he returned his warrant to the British Admiralty and took passage for Philadelphia.

Partly through his reputation as a capable seafaring man and partly through the influence of his brother, he was appointed a captain in the "Pennsylvania Navy," and shortly thereafter in the Continental Navy. In command of the brig *Andrew Doria* he was a part of the small fleet which landed Captain Samuel Nicholas and his marines in their first amphibious operation, against New Providence. After an initial blunder in the approach, Commodore Esek Hopkins accepted an alternate naval plan suggested by Lt John Paul Jones. As history records, the operation was a success.

After two spectacular cruises on the *Andrew Doria*, Biddle was given command of the *Randolph*. She blew up on her third cruise, while pitting her 36 guns against the 64 gun British ship of the line *Yarmouth*.

Captain Dauntless is a comfortable book to read. It

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has a slow, easy style. Although written in considerable detail and lacking in suspense, it is far from a dull book. Its characters are strong and its anecdotes full of local color. It is straight biography. The author has not fabricated to fill in lost details.

The student of naval history or of the revolutionary period will find *Captain Dauntless* well-documented and indexed. It includes a bibliography, as well as copies of muster rolls from the *Andrew Doria* and the *Randolph*.

The author conveys realistically to the reader the impatience that the colonial captains must have felt at the maddening delays in getting their ships to sea. Ships were frequently kept in port for months because of late or confused orders, adverse weather, short supplies, or lack of men. By the time a ship was otherwise ready for sea her bottom might have become so foul in the harbor that she would have to be scraped, and the whole process of delays would start all over again.

The *Randolph* had four masts before she saw action. The first was rotten, and broke on her shakedown cruise; the second and third were struck by lightning; months after she was commissioned, she got to sea for her highly successful second cruise—with a lightning rod on her mainmast.

William Bell Clark, an advertising man by profession, makes research on naval history his hobby. He is the author of *When the U-Boats Came to America; Lambert Wickes, Sea Raider and Diplomat;* and *Gallant John Barry, Naval Hero.* ARC

Civil War on the Mississippi . . .

GUNS ON WESTERN WATERS—H. Allen Gosnell. 273 pages, illustrated, maps. Baton Rouge: Louisiana State University Press. $6.50.

The price of this book will probably keep any but the most avid Civil War reader from buying it. In a way this is a shame, because the book is a fine example of how such a history can be written and edited. For the most part Mr Gosnell lets the participants tell the story themselves—he quotes largely from contemporary sources and puts them down side by side, North and South, so that one complements the other. The illustrations are original photographs. The outstanding flaw in an otherwise well-presented volume are the maps which are most amateurish.

The title is somewhat misleading—or at least it is not very descriptive. The book covers the Civil War as fought on the Mississippi by the river boats, a most unique and unorthodox war replete with such characters as the Porter brothers and the Ellet family and cotton bale and tinclad battleships like the ram *Arkansas* and the gunboats *Pittsburg* and *Carondelet.* EHS

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"And the Rockets' Red Glare—"

continued from the back cover

infrequently exploded prior to leaving the launcher, and on many occasions reversed the course on which it had been launched, to come screaming and hissing back in the general direction of the launching site. Sir William Congreve, the inventor, allowed that this latter characteristic was due to wind action on the guide-stick. Wellington, the soldier, patently dissatisfied with both Sir William and the wind, simply issued an order that rockets would not be used by troops under his command. However, some evidence exists that rockets were used at Waterloo.

The next target for Congreve rockets was the United States. The British Fleet, under Sir Adm George Cockburn, initiated the Americans to rocket fire when, during the middle of the night of May 2, 1813, inhabitants of Havre de Grace, Maryland, were awakened from their slumbers with some well-aimed rocket salvos from the 19th Century forerunner of the LSM(R). Rockets were used again in the Chesapeake area against Commodore Barney's barge flotilla in June of 1814. British Rocket Infantry made its appearance against Gen Winfield Scott at the Battle of Lundy's Lane in July, 1814.

The British Fleet, now flushed with their previous success in the Chesapeake, moved into position for what was to be one of the most famous and best remembered events of the "Second War of Independence." Putting a landing force ashore in the Patuxent River in August 1814, they marched on Bladensburg, Maryland. Here, after closing with Gen Winder's defending American forces, the British directed a flight of Congreve rockets against Stansbury's Brigade of Maryland Militia. Two regiments broke and fled in wild disorder, allowing the brigade flank to be turned. A detachment of U. S. Marines from the Washington Navy Yard, along with some naval personnel, acting as a second line of defense, stood their ground until some time later. Unfortunately history records no personal impression of being a target for the Congreve rocket during this engagement.

Benjamin Lossing in his *Field Book of the War of 1812*, published in 1868, provides a note of interest concerning this era, reflecting the confidence of the invaders in their ultimate victory, after the capture and burning of Washington, D. C. A footnote of this old volume states, "The London Times, then (1814) as now (1867), the exponent of the principles of the ruling classes in England, and the bitter foe of the American people, gloried over the destruction of public buildings, and the expulsion of the President and Cabinet from the Capitol, and indulged in exulting prophecies of the speedy disappearance of the great Republic in the West. 'That ill-organized association,' said the Times, 'is on the even of dissolution, and the world is speedily to be delivered of the mischievous example of the existence of a government founded on democratic rebellion.' "

Less than a month later, in September 1814, the British Expeditionary Force turned its attention northward to Baltimore. Although a land attack was made on Baltimore by Gen Ross, the interesting and best known phase of the campaign was the British Fleet's action against Fort McHenry. In addition to special mortar (bomb) ketches, the British had converted, under the personal supervision of Sir William Congreve, the *Erebus*, a 20-gun sloop of war, into a "Rocket Ship." She was fitted with 20 rockets on each broadside. Each discharger was capable of firing about one rocket per minute. HMS *Erebus* closed the range on Fort McHenry, under cover of the bomb ketches and other ships, in an attempt to bring the fort within effective rocket range (about 3500 yards at this time). The Fort's concentrated fire on the "Rocket Ship" drove her back out again, and the majority of the rockets, failing to reach the Fort, burst in the air.

Thus during the night of 13-14 September, 1814, while held prisoner aboard the cartel ship *Minden*, during the British Fleet's bombardment of Fort McHenry, Francis Scott Key meant just what he said as he composed his now famous and enduring words "And the rockets' red glare, the bombs bursting in air."

ALB, JR.

"And the Rockets' Red Glare—"

IN THESE DAYS OF ATOMIC WEAPONS, GUIDED missiles and other new and fearsome weapons of war, the rocket is apt to be regarded as one of the more recent acquisitions to the fine art of destruction. In reality, our present-day rockets are very old weapons returned to the field of combat in modern battle dress. When Francis Scott Key, while a "forced guest" of the British Navy, composed our National Anthem, he did not jot down the oft sung line "And the rockets' red glare . . ." merely for its lyric qualities. The British were at this time actually employing rockets in their attempted reduction of Fort McHenry at Baltimore, Maryland. Furthermore, the British had been evincing more than a passing interest in the field of rocket development and employment since about the beginning of the century.

The earliest historical reference to military employment of rockets is the suggestion that the people of India may have used a form of war rocket as early as 200 or 300 B.C. Again in the Orient it is known that the Chinese used rockets, then referred to as "fire arrows," against the Mongols in 1232 A.D. India appears on the rocket scene again in 1399 when Tamerlane used rockets in the siege of Delhi. Apparently the Indians were determined upon the use of rockets as their primary heavy weapon, as the accounts of the Mahratta Wars in India show that they used rockets successfully against the British in 1780-1784, and again in 1792. By 1799 the Indian Rocket Corps had a total strength of 5,000 men.

Outside of a few vague references to rockets or similar machines of war, history does not accurately and completely record any real military interest in rockets in Europe until the turn of the 18th Century. At this time William Congreve (later knighted) began a feverish period of rocket development at the Royal Laboratory, Woolrich, England, which was to bring the rocket to the foreground as a war weapon in the Napoleonic Wars and the War of 1812.

The first actual experiments conducted by Congreve in 1804 were based on "skyrockets" purchased in London. By the time the British were ready to make their unsuccessful attempt against Boulogne in 1806, the Congreve rocket was ready for its battle test. Furthermore, the rockets were fired from "small boats" of the British Fleet; the forerunners of our 20th Century LCS and LSM(R)!

At this time (1806) Congreve describes his steel rocket as weighing 32 pounds, with a maximum range of 3,000 yards, and employing a 15-foot guide stick. These rockets were launched from light copper tubes or racks. The Napoleonic Wars continued to provide a proving ground for the constantly improving Congreve rockets, and they were employed with apparent success at Copenhagen and Walcheren in 1807; Adour, Leipzig, and Danzig in 1813.

It was during this period that that rugged individualist, the Duke of Wellington, provided an interesting sidelight on rocket employment by ground forces. He had observed that the Congreve rocket had developed a few disconcerting habits. It not

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